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FIRE ENGINEERING

The Journal of the Fire Protection Profession Since 1877

Vol. 86, No. 6 JUNE, 1933 Member A.B.C.-A.B.P.

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By FRED SHEPPERD

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- MOTOR FIRE APPARATUS PUMPS
- FIRE EXTINGUISHERS AND THEIR USE
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- FIRE-FIGHTING METHODS
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- BUILDING INSPECTION
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FIRE ENGINEERING

The Journal of the Fire Protection Profession Since 1877

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Some Light

THERE SEEMS to come a time in the life of most firemanic organizations when a few well-intentioned members get the "Let's start our own magazine" fever.

• Frequently the germ is planted by some outside promoter who promises to perform miracles if given some financial assistance but whose only real interest is in making some easy money on a quick turnover. To make the thing pay advertising donations are too often sought in a way that isn't apt to enhance an association's prestige. Further than that, local sources are tapped for contributions that might normally, and more properly, go to relief and pension funds. No publication can live long under those conditions.

• As a matter of fact, we do not know of a single association magazine venture ever undertaken in the fire department field that has worked out successfully, and there have been several. Usually the enthusiasm dies down after the first few issues and the proposition gradually falls by the wayside.

After all, publishing is a publisher's job.

The Publishers

IN THIS ISSUE

VOL. 86 JUNE, 1933 No. 6

With the Editor 163
By Fred Shepperd

Page

Lewiston and Its Fire Department—Maine City Ready To Welcome the N. E. A. F. C. (Portrait—Illustrated) 164
By Harry Balknap

Officers, Directors and State Vice-Presidents, N. E. A. F. C. (Portraits) 166

The Round Table Department 167
Discussion on Plans Used for Drying Fire Hose (Concluded)

Questions and Answers 171

What's Burning 173

Fire Department Improvements 176
Record of Business Activities in the Fire Protection Field

The Fire Service Instructor (Part Twelve) 179
By O. D. Adams and Edward L. Boatright

False Alarm (Illustrated) 180
Humorous Side of the Fire-Fighting Profession

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Fire stations in many municipalities have overcome battery charging problems with a G-E Tungar. (40 are used in Cincinnati alone.) Write today for complete details.

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For complete details or consultation with our specialists, mail the coupon today.

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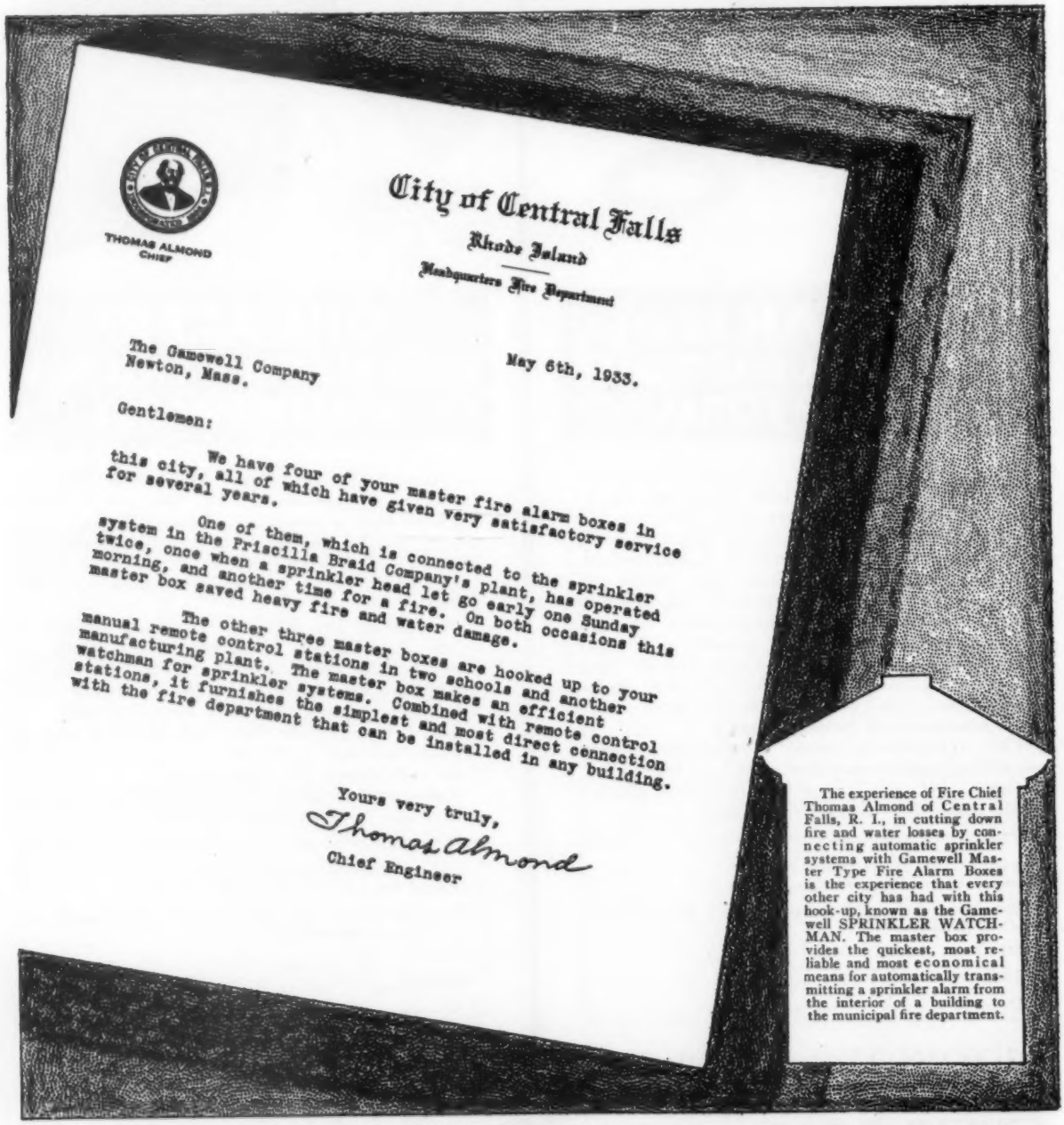
Proof from another Fire Chief

Master Box Connection to Sprinkler System Cuts Down Fire and Water Loss at Central Falls, R. I.



THOMAS ALMOND
CHIEF

City of Central Falls
Rhode Island
Headquarters Fire Department

The Gamewell Company
Newton, Mass.

May 6th, 1933.

Gentlemen:

We have four of your master fire alarm boxes in this city, all of which have given very satisfactory service for several years.

One of them, which is connected to the sprinkler system in the Priscilla Braid Company's plant, has operated twice, once when a sprinkler head let go early one Sunday morning, and another time for a fire. On both occasions this master box saved heavy fire and water damage.

The other three master boxes are hooked up to your manual remote control stations in two schools and another manufacturing plant. The master box makes an efficient watchman for sprinkler systems. Combined with remote control stations, it furnishes the simplest and most direct connection with the fire department that can be installed in any building.

Yours very truly,
Thomas Almond
Chief Engineer

The experience of Fire Chief Thomas Almond of Central Falls, R. I., in cutting down fire and water losses by connecting automatic sprinkler systems with Gamewell Master Type Fire Alarm Boxes is the experience that every other city has had with this hook-up, known as the Gamewell SPRINKLER WATCHMAN. The master box provides the quickest, most reliable and most economical means for automatically transmitting a sprinkler alarm from the interior of a building to the municipal fire department.

THE GAMEWELL COMPANY

"A Box a Block"

NEWTON, MASSACHUSETTS

FIRE ENGINEERING

The Journal of the Fire Protection Profession

Volume 86 JUNE, 1933 Number 6

With the Editor

Good Will Advertising That Hurts

In one of the New England daily papers early this year there appeared an illustrated advertisement in which attention was called to the use of a telephone as a means of summoning the Fire Department. The wording of the advertisement was such as to convey the impression that the telephone is worthy of sole reliance in the event of fire.

Its acceptance by the public as such would naturally tend to diminish the use of the fire alarm system. While the advertisement was apparently intended as a sort of propaganda to build good will, indicating how the telephone service aided in affording protection of life and property against fire, nevertheless the result of such publicity would be damaging in the extreme.

To those who are familiar with the frailties of telephone systems, and the inaccuracy of the information sent by telephone by persons under stress of excitement incidental to discovering a fire, the danger of such publicity is evident. A continuous effort has been made during recent years by leaders in public safety to educate the public in the use of the fire alarm system as a means of calling the Fire Department quickly, and at the same time avoiding errors. Publicity, such as given in the New England paper, would tend to break down all this educational effort by leading the public to believe that the telephone was entirely dependable for transmitting an alarm.

Records of American Fire Departments are filled with far too many instances of delayed alarms and inaccurate transmission of alarms, where the telephone had been used. Rarely can the fire alarm system be accused of such inaccuracies or delays, for by its very nature, assuming it to be of modern design, it automatically informs the fire alarm headquarters if line trouble develops; it cannot transmit an incorrect location.

On the other hand, a blizzard, a fire, or other calamity may put out of service a large section of the telephone system, and if fire alarm boxes are not plentifully provided, the results may be disastrous.

The New England Municipal Signal Association at a recent meeting passed a resolution condemning the advertising referred to above, and justly so. A copy of the resolution was sent to the offending company, and it is very likely that a repetition of the advertisement will not occur.

Fire Department organizations should handle similar situations in a like manner. It will do a great deal to ward off misinformation on sending in fire alarms and which might prove highly damaging.

Fred. Sheppard

MAIN LIBRARY U.C.

Lewiston and Its Fire Department

Maine City Ready to Welcome the N. E. A. F. C. Convention

By HARRY BELKNAP

Chief Reuben E. Estes

A LARGE attendance seems assured for the eleventh annual convention of the New England Association of Fire Chiefs, which will be held in Lewiston, Me., on June 20, 21 and 22. This is the second time that the organization has held a convention in the state of Maine, a previous and most successful gathering of New England Fire Chiefs having taken place in Portland.

Lewiston, the scene of this year's convention, is a city of upwards of 35,000 population. It is a manufacturing center, the most important industries being the making of cotton and woolen textiles, shoes, shirts, and tools. The factories use hydraulic power supplemented by steam.

The city is hilly, but the grades are moderate and the principal mercantile district is nearly level. Main Street is from 60 feet to 115 feet wide, Lisbon Street is 60 feet wide and other streets are from 38 to 60 feet in width, with an average width of 50 feet.

The City's Fire Loss Record

According to a report of the National Board of Fire Underwriters the gross fire loss in Lewiston for the five years prior to 1926, as given in fire department records, amounted to $422,022, the annual loss ranging from $71,196 in 1921 to $208,298 in 1922. The average yearly number of actual fires was 135, ranging from 90 in 1920 to 161 in 1923, with average loss per fire of $4,625.

Based on average population of 33,000 the average number of fires per 1,000 population was 4.1 and the average loss per capita was $2.53.

The Water Works of Lewiston

The water works, which are municipally owned, were started in 1878, and are controlled by a Board of Water Commissioners, composed of the Mayor, ex-officio, and six members elected for six year terms by the city government, one being chosen Commissioner each year.

Box alarms of fire are sounded by a whistle at the pumping station. The water supply originates in Lake Auburn and flows by gravity to the pumping station. It is furnished to the city in one service by direct pumping with a reservoir as an equalizer. Water is also supplied to one third of the city, including the manufacturing and mercantile districts, by gravity from the lake at reduced pressure.

Lake Auburn is situated in Auburn across the Androscoggin River and also supplies water to the city. The lake is three miles from the city. It is three miles long by two and one-half miles wide, and has an average depth of 125 feet.

Mains and Pumping Station

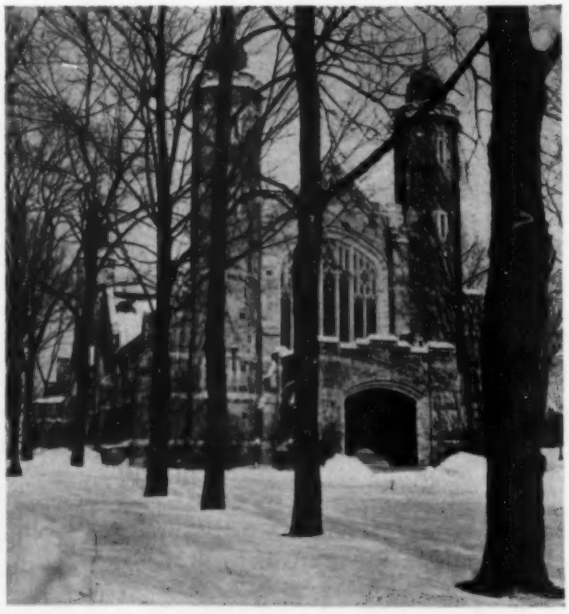
From the lake to the pumping station there is a single line of 36-inch pipe which is 3,175 feet in length and 12,700 feet of 24-inch pipe to the river crossing, which consists of two 24-inch pipes about 750 feet long, bedded in concrete on solid rock. These two mains combine into one 24-inch main which supplies the suction well at the pumping station through a regulating valve, 24-inch reducing to 20 inches, equipped with a check valve continuing to connection with a 20-inch discharge main. The Lewiston and Auburn supply mains have a 12-inch cross connection about 3,175 feet from the lake.

The pumping station is a one story brick building built in 1895 and situated on the east bank of the river. The equipment consists of four Worthington pumps which use water power and electric current.

The reservoir was placed in service in 1878 and is located about one and a half miles southeast of the pumping station.

The Fire Department

The Lewiston Fire Department at the time of the last



Chapel of Bates College, Lewiston, Where Memorial Services Will Be Held

Underwriters' Report in 1926 was composed of part full paid firemen and part call men. The first full paid permanent fireman was appointed in 1880. Chief Charles E. Fortin, who was appointed head of the Lewiston Fire Department in 1925, was formerly master mechanic with the rank of captain and prior to that was for seven years a call man in the Brunswick, Me., Fire Department. During his term as Chief of the Lewiston department many improvements were made, including motorization of apparatus and installation of automatic alarm systems in factory and mercantile buildings.

The Lewiston fire department in 1926 consisted of a Chief, four Assistant Chiefs, 77 firemen, 24 full paid and 52 call men, one captain and five lieutenants. The Chief, sixteen privates and the superintendent of fire alarms were full paid. The four Assistant Chiefs, four captains, four lieutenants, surgeon, and other privates were callmen.

Fire Department and Fire Alarm Equipment

The equipment, housed in three fire stations with a hose reel at Barkerville, consisted of a 750-gallon motor pumping engine, three hose wagons, city service hook and ladder truck, two horse drawn trucks and two steam fire engines in reserve. There were 76 fire alarm boxes and 277 street hydrants.

The fire alarm equipment, of Gamewell make and automatic type, is housed in a fire resistive section of fire headquarters. The apparatus is now all motorized and additional fire alarm boxes and hydrants have been installed.

Principal Hotels in Lewiston

The principal hotels in Lewiston are the DeWitt, Adams, Littleton, Tavern, Exchange, and Colonial, and the Auburn, Elm, and Whitehall in Auburn, which is just across the river from Lewiston.

Convention headquarters for the registration of the chiefs, distribution of badges, etc., will be at the DeWitt Hotel. This is the only hotel with complete dining room facilities.

There are plenty of good, well furnished rooms available in the various hotels, but it will not be possible for everyone to be accommodated in the headquarters hotel. Some of the rooms have bathrooms connecting and some of the rooms have hot and cold water in washstands. Other rooms are without baths.

The rates for rooms are as follows: Rooms with bath, for one person, $3 to $3.50; for two persons, $1.75 to $2.50 each. Rooms with hot and cold running water, for one person, $1.50 to $2; for two persons, $1 to $1.50 each. Rooms without toilet facilities, for one person, $1 to $1.50; for two persons, $1 each.

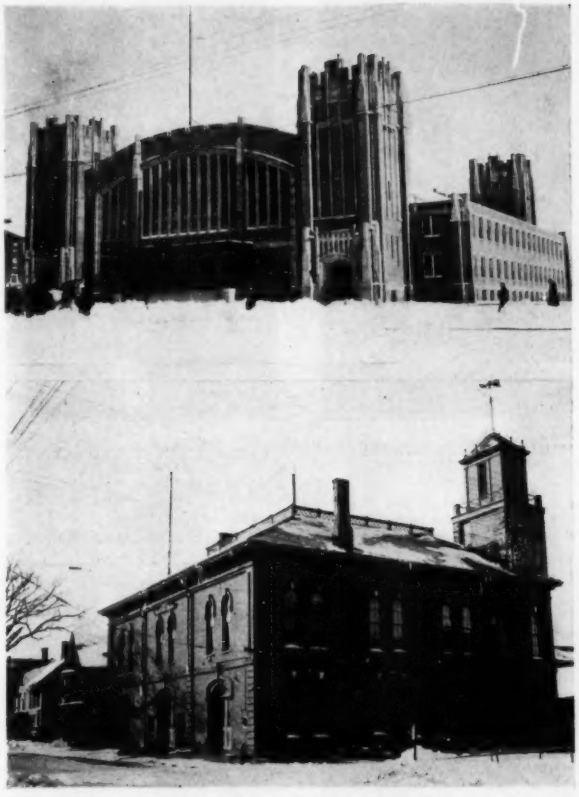
Registration on Monday, June 19

The convention opens Tuesday morning, June 20; but the Committee on Registrations and Reservations, composed of George W. Austin, Herbert K. Pratt, and P. Hildreth Parker, of the Box 52 Association, Inc., of Boston, Mass., will be on hand Monday afternoon and evening to take care of the early arrivals. Many of the Chiefs and guests are expected to arrive in Lewiston on Monday, as "the night before" at New England conventions is always a jolly time of impromptu reunions.

The annual memorial service will be held on Tuesday, immediately after the addresses of welcome by Lewiston officials. This meeting will be held in the chapel of Bates College in Lewiston.

Exhibits at State Armory

The exhibits will be in the State Armory and will include a complete line of Fire Department apparatus and accessories.



Upper—State Armory, Lewiston, Where Exhibits Will Be Held.
Lower—Fire Headquarters, Lewiston

There will be matters of interest on the program for the chiefs of both large and small Fire Departments and special addresses and discussions for Forest Fire Wardens.

One of the principal addresses will be on "Arson: Its Detection and Prevention," by Chief Joseph N. Sullivan, of Utica, N. Y., former President of the International Association of Fire Chiefs. He will describe the successful methods used by the Arson Squad of the Utica Fire Department, in bringing incendiaries to justice and will have a series of interesting lantern slide views to illustrate his talk.

President Alfred H. Koltonski, of Rutland, Vermont, and Secretary John W. O'Hearn, of Watertown, Mass., have worked hard to assure an attractive and diversified program.

The Exhibit Committee is composed of Edgar E. Ramsdall, Reserve Deputy Chief of the Lewiston Fire Department, Chairman; George C. Bancroft, Chief of the Auburn, Me., Fire Department; and Harry J. Lovell, of Portland, Me.

Entertainment Features

The entertainment features will include a "get-together banquet," automobile trips for the ladies, a visit to one of the Lewiston Mills, and free admission to local theatres.

Dr. Joseph Scannell, Fire Commissioner of Lewiston, and Chief Reuben E. Estes have been busy arranging details of the convention and extend a hearty welcome to the visiting Chiefs.

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Rutland, Vt.

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Ex-President
Brookline, Mass.

OFFICERS, DIRECTORS AND EX-PRESIDENTS, NEW ENGLAND ASSOCIATION OF FIRE CHIEFS

THE ROUND TABLE

For Practical Discussion of Current Fire Department and Fire Management Problems

PLANS USED FOR DRYING FIRE HOSE

EVEN though fire hose is made to give many years of hard service, it must be handled with certain precautions if its maximum life is to be obtained.

The hose must be carefully dried after use to prevent the growth of mildew, or the jackets will rot. Hose drying towers and hose drying racks are commonly used after the hose has been washed.

This discussion on the drying of hose is a continuation of the problem that was published in the April issue of FIRE ENGINEERING. In the box on the following page is the question that will be discussed in the next issue. Should you have some comments that you would like to add to the next discussion, you are invited to write to the "Round Table Editor, FIRE ENGINEERING, 24 W. 40th Street, New York, N. Y.

Discussion of the Question

J. L. McLane, Chief, Charleston, W. Va.: We have a 75 foot tower leading from the basement, with an opening in the top. The hose is washed in a trough and then pulled up into the tower and hung full length.

A slowly revolving fan at the top of the tower pulls the heat from the basement, causing it to pass through the hose. When dry the hose is taken down, rolled up and put on racks for use again.

When drying hose in this manner, weather conditions have no effect on same.

One condition in favor of the hose rack (which we prefer), is that it can be moved about to any location desired.

Louis Bausch, Chief, Newark, Ohio: All our hose is suspended in a hose tower after each time used and left there until thoroughly dried. No wet or damp hose is ever permitted to be placed on truck.

During the winter season, heat is furnished in the tower by means of gas stove heater. We have never experienced any burst hose jackets as a result of mildew, yet we have had hose in service for a period of eighteen years.

As our years of experience have taught that very little trouble has resulted from use of a nationally known brand of high class fire hose, it is natural that we are partial to this particular hose and do not encourage the purchase of inferior or jobber's hose. The "best is always the cheapest" has always been our motto.

Until we find that our present system of drying is faulty, which we do not contemplate, we do not sense the need of any other system.

August G. Derra, Chief, Schenectady, N. Y.: Our method of drying fire hose is to stretch the hose on sidewalk when weather permits, and on ground floor of stations during inclement weather conditions. To date no serious effect has been noticed as a result of this practice.

I have not considered any other type of hose drying equipment because our present system as described has been very satisfactory. We discarded our hose tower many years ago because of the severe strain on the hose at the couplings.

John Ohotnicky, Chief, Olyphant, Pa.: Our plan of drying fire hose is in the tower, our tower being 60 feet in height. I find that the hose drys very quickly and stretches if left in the tower a few days.

If I were to consider hose drying equipment, the type preferred would be the rack system. In this manner the hose can be laid out and properly cleaned and made ready for use again.

Alex. Calhoun, Chief, Chester, Pa.: Most of our companies use the tower for hose drying and find this method very good. The towers are about 30 to 35 feet high and the hose is hung on half-moon blocks or pins. As our present procedure in hose drying has proven quite satisfactory, it is the method I would recommend.

F. M. Kuhn, Chief, Pontiac, Mich.: We use towers for drying hose, and know of no way that weather conditions could affect this system.

We have four stations, three of which have towers and the other a rack. The rack is never used because it takes too long to dry the hose when laid thereon. It has been found that hose appeared to be dry and except for close inspection would have been loaded before properly dried. A well ventilated tower will dry hose in from 8 to 12 hours, and there is no danger of storing hose with water in it which I understand is bad for hose.

Jos. Fifarek, Traverse City, Mich.: In summer, we dry our hose on the cement sidewalk and in winter and during wet weather in the hose tower under slow heat. Weather conditions have in no way affected this arrangement; in fact, we get very good results.

If I were considering hose drying equipment, I would prefer the rack type, because when drying in the tower, all the water is drained from the hose, thereby drying out the rubber lining. The essential part of drying hose is getting the fabric dry so as to prevent its mildewing or rotting. If the hose is not used within a certain length of time, we run water through it to keep the rubber moist. Cared for in this manner our hose lasts from fifteen to twenty years.

Frank Charlesworth, Chief, Providence, R. I.: We have a series of hose racks on the first floor of every company house with windows above racks. They are remote from steam pipes and an even temperature is maintained.

Hose must be laid on racks in single lengths with the proper pitch to permit drainage. With this layout, weather conditions do not make any difference and we experience no trouble from mildew.

If called upon to construct or arrange for hose drying equipment I should continue our present practice.

E. A. McGranahan, Chief, Wheeling, W. Va.: My department uses the tower for drying fire hose which is hung double. Towers are unheated with the exception of those at the last three stations built which have steam heat if desired.

Weather conditions have had no noticeable effect as all towers are built on the inside of the station.

The tower is my choice for drying hose, my reasons being that they do not

HERE IS THE PROBLEM

What plan do you use for drying fire hose?

In what way has weather conditions an effect on this arrangement.

If you were to consider hose drying equipment, what type would you install and why?

take up much space, the hose dries in the natural way which gives longer life and is less injurious to the hose, and it is there ready for use at any and all times.

James Black, Chief, Grand Forks, N. Dak.: We use wall racks located on the side walls of the station for drying fire hose. Steam coils situated beneath the racks furnish heat for drying hose in cold weather.

The racks are perforated on the bottom to allow free circulation of air and spaced so that the hose does not lay close together. We find this method very satisfactory. The wall rack is preferred to the hose tower, as we think it much handier and easier on hose that is frozen.

R. H. Strang, Chief, Richland Center, Wis.: At the present time we hang the hose up in a tower which is about 25 feet in height, hose being pulled over a roller.

This method is very unhandy with considerable work attached thereto. I believe the best way to dry hose would be to have a rack on the side wall of the station, so that hose could be laid on it. This would be much handier and would eliminate a lot of work.

S. Ferguson, Chief, Fort Worth, Tex.: Fire hose is dried on portable racks, also in one tower, and on cement sidewalks about fire station buildings.

In this climate we keep hose from the sun from the first of June until the first of October, as the sun has a tendency to separate lining from the fabric.

If installing hose drying equipment, portable drying racks would be our choice due to weather conditions as mentioned above.

Ed. F. Dahill, Chief, New Bedford, Mass.: Most of our older stations use hose towers, others use hose racks in the cellars.

As fire stations are heated eight months in every year and free circulation of air is provided when hose is being dried, weather conditions do not make any great difference.

Hose drying racks will give satisfactory service if properly designed. Hose towers are just as good; in fact I like them better because in a hose tower there is always free air circulation.

Julius F. Jaeckel, Chief, Pekin, Ill.: We dry our fire hose in the hose tower which is 8 feet square and 60 feet high, vents being provided at the top of the tower.

The tower would be my choice in selecting hose drying equipment. Our tower has been in use since 1884 and have had no trouble in drying hose, besides we believe it has lengthened the life of the hose by keeping the rubber lining moist. The tower has a concrete pit beneath a 2 x 4 slatted floor and contains about 9 inches of water at all times. The moisture from this pit is drawn through the hose like smoke in a chimney and increases the life of the rubber lining. We can hang 2,000 feet of hose at full length with 10 ropes (2 sections to each rope). There are winches on two sides of the tower.

C. W. King, Chief, Ft. Lauderdale, Fla.: We dry hose on racks which are situated in a shady location. This method eliminates folds which we believe lengthens the life of the inner lining. Annual tests were made recently, and out of 8,000 feet of hose 3 sections with weakened inner linings were discovered. These sections had been purchased between 1922-1928. This record is credited to proper care of hose: washing in good clean water after use, and then drying on racks in a cool shady location.

Otto Geisler, Chief, Leavenworth, Kans.: We dry our hose outside on an incline during the summer, and turn it over so both sides can be properly dried and swept with a straw broom. During the winter, we use a hose tower and lay the hose over a drum.

If hose drying equipment were being considered, a good ventilated rack located inside the station would be my choice.

J. J. Blackstone, Chief, Burkburnett, Tex.: At present we are drying our hose on the sidewalk. During wet weather we have no way of drying same and just have to wait until the weather clears to get our hose properly dried. We don't like this plan, but it is the best we can do now.

Should drying equipment be considered, the hose tower would be favored because weather would not affect the hose and it would be in a better condition. Storage of hose in a tower, we believe, is better for hose due to the fact that it would have no short bends and lining would be less likely to crack.

J. W. O'Hearn, Watertown, Mass.: Hose is laid out full length on racks in a specially heated room and thoroughly dried inside and out. Racks are well pitched so that hose does not lay flat, but on edge with pins separating each length. This provides an air space and keeps each piece upright until dry. When dry, hose is kept in a cool dry place in rolls until used again.

W. F. Morgan, Chief, S. Norfolk, Va.: Our department uses an inclined rack for drying fire hose. During unfavorable weather conditions it is difficult to dry hose in this manner. Were I to consider the installation of hose drying equipment, it would be a steam heated tower as it has been my experience that it is the quickest method of drying.

F. C. Brown, Chief, Grand Island, Neb.: As our station when built was equipped with a tower, we are at present using that method of drying. When we build a new station, a built-in hose rack located in the basement will be my choice. With a cement floor and cellar drain, hose could be washed off (during winter months) and dried; also that the hose would keep better in a cool basement during hot weather.

James Garwood, Chief, Michigan City, Ind.: This department uses a hose tower some 35 feet high and hangs the hose over a drum for drying.

Weather conditions have not bothered us to any extent as tower and furnace room connect and the heat passes up through tower.

My choice of hose drying equipment would be the tower, approximately 55 feet in height so that hose could be hung by couplings, permitting a draft to go the entire length of hose.

J. M. Andrews, Chief, Sherman, Tex.: We wash hose on concrete wash rack and dry on same in fair weather. During damp weather we put hose in station which is kept warm for drying the hose. We have experienced no trouble in drying hose.

C. H. Pritchard, Chief, Jackson, Mich.: Department is equipped with a 75-foot hose drying tower. Weather conditions have to my knowledge not affected this method of drying if not left hang too long. Hose should be left in tower just long enough to dry the jacket.

The hose tower would be my choice of hose drying equipment, because I think this is the most efficient way to dry hose.

Chas. P. Loller, Chief, Hamden, Conn.: We lay our hose out on the sidewalk to dry, weather permitting. During wet or freezing weather it is put into the cellar to dry.

If hose drying equipment were being considered, 50-foot racks would be recommended because the air could get around the hose.

F. C. Seibert, Chief, Houston, Tex.: We dry fire hose by placing it out in the sun. It is put out in the morning and taken in at night. We have experienced no difficulty with the above method and would recommend same.

Howard Travers, Chief, Baltimore, Md.: This department employs hose towers for drying of fire hose. Weather conditions do not affect drying of hose in this manner.

Having no definite information on the various methods of drying hose I am unable to state what specific equipment I would consider.

M. J. Brun, Chief, Fort Smith, Ark.: We use the hose tower with stationary slatted drum for drying of fire hose. Two ventilators are provided at the top of the tower. These towers are built in with the building and the surplus heat from building passes up through the tower and dries hose.

Henry E. Whitney, Jr., Chief, Brattleboro, Vt.: We use the tower method of drying fire hose, weather conditions having no effect on this arrangement.

HERE IS THE PROBLEM FOR THE NEXT ISSUE

What is your opinion concerning rules to make fire apparatus responding to fires, obey the traffic rules?

Is it wise to permit drivers to pass vehicles on the left side of the road, if that is the only clear spot on the road?

To what extent should the apparatus of the department obey traffic stop lights?

If installation of drying equipment were being considered, it would be the hose rack, located in basement.

V. H. Steele, Chief, Billings, Mont.: Hose tower is employed for drying fire hose, each length being hung by its coupling. Weather conditions have in no way affected this method.

My choice of drying equipment is the inclined rack. This arrangement requires less labor, is not as liable to injure the hose, and permits a better style of architecture for the station house, being used.

John H. R. Meyers, Chief, Madison, N. J.: The tower is used for drying hose. If considering hose drying equipment my choice would be the tower, because it drains and dries the hose in the shortest possible time.

F. A. Tenney, Chief, Braintree, Mass.: We dry our hose in the hose tower, and would recommend this method as we have had good results from its use.

W. L. Harrelson, Chief, Reidsville, N. C.: I use a lattice rack, 4 feet wide by 55 feet in length for drying fire hose. It will hold 30 sections of hose and is located within the fire station. Being of the portable type, it can be moved outdoors when the weather permits.

P. L. T. VanTienen, Chief, Newburgh, N. Y.: Our method of drying fire hose is by hanging in dryer. Weather conditions have never troubled hose in drying process.

If considering the installation of drying equipment, an airy place or room with concrete floor would be recommended.

* * *

ANSWERS TO PREVIOUS QUESTION

The following replies were received in answer to a previous question on whether or not the legalized 3.2 per cent beer should be permitted in the fire stations or at department functions:

H. R. MacMillan, Chief, Jacksonville, Fla.: Beer should be prohibited in fire stations.

J. T. Moore, Chief, Memphis, Tenn.: Before prohibition went into effect, beer was not permitted around the fire house, and of course the same steps will be taken now. If the men wish to indulge in the beverage outside, that shall be their privilege.

E. N. Whitaker, Chief, Tacoma, Wash.: Beer or liquor of any kind is not permitted in or around the fire station—not even the 3.2 kind.

William Conlin, Chief, Hamilton, Ohio: Personally, I am not going to allow the men of my department to indulge while on duty, for some of them will abuse such a privilege in more ways than one.

J. L. McLane, Chief, Charleston, W. Va.: In the past, it has been my policy not to allow any drinking while on duty and this policy will probably continue in the future. It seems to me that while working under the two-platoon system that the men could refrain from drinking beer until they get off duty. While some can use the beer to a moderate degree, others will go to the extreme. I believe, therefore, it should be kept out of the department.

S. H. Hansen, Chief, Duluth, Minn.: In addition to our rules and regulations prohibiting intoxicating liquor in or about quarters, I have issued an order barring the bringing of beer into station. Although 3.2 beer is supposedly not intoxicating, if imbibed freely, it undoubtedly affects a man's alertness, makes him more susceptible to injury, causes him to be unreliable and irresponsible, a menace to his fellow workers and a potential liability to the department. Fire-fighting requires a clear mind, a vigorous and supple body.

James P. Welsh, Chief, Eau Claire, Wis.: While officially the 3.2 beer is classed as a non-intoxicant, it is known that it is capable of producing intoxicating effects.

It is my opinion that sobriety is of the greatest importance as applied to the manual force of a Fire Department appointed to safeguard life and property. The operators must guide our fast moving apparatus through the maze of present day traffic.

This department declares 3.2 beer intoxicating and enforces an existing rule that prohibits intoxicating drink in or about fire department quarters.

J. N. Murphy, Chief, Kingston, N. Y.: I am opposed to the use of 3.2 beer in the fire house. If beer is allowed in the fire house it would mean opening the doors to trouble, the breaking down of the morale and discipline of the department.

G. H. Neff, Chief, Grafton, Ill.: The traditional fish and beer suppers so conducive to bringing good fellows together may now be revived with, I believe, excellent results as applied to volunteer departments. Such affairs should tend to improve attendance at meetings and keep alive interest in the organization. I do not believe there will be any loss of efficiency or that lack of discipline would follow firemen taking beer in moderation at meal time while on duty as the men would drink any other beverage with their meals. But undue and unlimited drinking of the restored beverage among men on active duty would, I am sure, be detrimental to efficiency and would develop a hazard to good discipline and firemanship.

Michael P. Leonard, Chief, Erie, Pa.: The use of beer was permitted in volunteer companies as these units often had the status of a club and each member had club privileges. To the best of my knowledge, beer was never allowed in paid departments.

While it may be permissible to permit a few bottles of beer to be drunk in the fire station, the Chief would soon find that the few bottles would assume greater proportions and would probably result in the bringing in of kegs. A privilege once granted is hard to rescind. Therefore, I am opposed to drinking beer around the fire station and I will not sanction it here.

CONFLAGRATIONS SEVERELY DAMAGE TWO MAINE CITIES

Demented Boy Starts $2,000,000 Fire in New Auburn — 400 Made Homeless by Conflagration in Ellsworth — Other Cities Rush Aid

MAINE has suffered two conflagrations during the past month which caused a property damage of approximately $5,000,000 and deprived nearly 2,000 persons of their homes.

Fire destroyed 200 dwellings and business places in Ellsworth, Me., on May 8 and caused a loss of $3,000,000. Firemen from Ellsworth and surrounding communities drained the reservoir in pumping water on the flames, and the city was forced to pump water directly from the Union River into the mains. Residents were warned not to drink the water unless it was boiled. Aid was obtained from Fire Departments of Belfast, Bangor, Brewer, Bar Harbor, Northeast Harbor and Bucksport.

A special call was sent for police and national guardsmen to prevent looting. Some officials are inclined to favor the theory that the fire was of incendiary origin.

American Red Cross and other relief agencies rushed to the aid of the stricken city, and three hundred tents of the National Guard was sent to house the refugees.

Before the state was reconciled to its loss, another conflagration occurred. About 1,500 persons were made homeless when fire swept through the business section of New Auburn, Me., on May 15 and damaged much of the residential areas. Loss was estimated at $2,000,000. Several days later an eleven-year old boy with retarded mental de-

Air View of the Ruins of 200 Dwellings and Business House in Ellsworth, Me., Which Followed $3,000,000 Conflagration

velopment confessed that he started a blaze in the first home to be destroyed. His record shows that he also started other fires. The fire started from a small blaze in a garage, which was whipped by a northwesterly wind to a four-story tenement at the rear of the garage. It spread to still other buildings and destroyed two schools, a synagogue and a large number of business houses. Within thirty minutes it seemed as though New Auburn was doomed. A telephone call was put through to Portland before the wires were affected. Sparks flew into the nearby city of Lewiston. Aid was rushed from Lewiston, Auburn, Rumford, Sabattus, Norway, Mechanic Falls, Augusta, South Portland, Portland, Brunswick, Freeport, Cumberland and Gardiner.

The first call for aid was received in Lewiston at 2:12 p.m. Firemen experienced considerable difficulty in obtaining water. The conflagration lasted for five hours before it was considered under control.

Cots and blankets were rushed by the National Guard, and the American Red Cross sent supplies. The Maine Central Railroad offered to help in moving supplies and placed sleeping cars at the disposal of the homeless.

The cover illustrates the extent of the damage caused in New Auburn.

WHAT'S BURNING

THE following list includes fires of $50,000 loss and over in the United States and Canada, for the month of May, 1933. These figures, compiled from the telegraphic reports are based on estimates made at the time, and are subject to later investigation and consequent revision. Taken as a whole, however, they are an approximately correct view of the losses incurred. The figures represent loss in thousands of dollars.

Month Ending May 31	Loss in Thousands of Dollars
Elizabethtown, Pa.—Elizabethtown Planing Mill damaged	80
Minneapolis, Minn.—Lumber yard of G. M. Stewart damaged	50
Carthage, N. Y.—New York Central icehouse destroyed	100
Cohoes, N. Y.—A. J. Rioux Co. icehouse destroyed	50
Chicago, Ill.—Green Mill bldg. damaged	80
West Chicago, Ill.—Reid, Murdoch & Co. plant damaged	50
Wayne, Alta.—Tipple and other bldgs of Rosedeer Mining Co.	80
Rochester, N. Y.—First M. E. Church destroyed	300
Clio, S. Car.—School bldg. destroyed	50
New Ulm, Minn.—Mill and elevator of New Ulm Roller Mill Co.	50
Kittanning, Pa.—Tipple of Mohawk Coal Mining Co.	60
Wake Forest, N. Car.—Administration bldg. of Wake Forest College.	150
Oakland, Cal.—Pier of Key System Ferry Lines	2,000
Cleveland, Ohio—St. George's Syrian Orthodox Church	50
Sayre, Pa.—Robert Packer Hospital destroyed	80
Lansing, Mich.—Whse. of Jury-Rowe Furniture Co., adj. property	125
Ellsworth, Me.—Business and residential property, 3 churches	1,000
Hemp, N. Car.—Childs' store, post office, adj. property	50
Quinwood, W. Va.—Property in business section	70
Burlington, Vt.—Business bldg. on Bank Street	70
Auburn, Me.—Business and residential property	800
Vancouver, Wash.—Half block of business property	100
Kilgore, Tex.—Hotel Kilgore destroyed	800
Dayton, Ohio—Whse. of Elder and Johnston Co.	175
Bloomsburg, Pa.—Hotel Magee destroyed	160
Ives, Wis.—Machine shop and two locomotives of Consumers Crushed Stone Co.	65
New York, N. Y.—Boathouse owned by Richard Cox on Hudson River	200
Sault Ste. Marie—Property of Cadillac-Soo Lumber Co.	50
Yonkers, N. Y.—Property of Joseph C. Ryan & Sons, Inc.	50
Columbia, S. Car.—Garage and 70 trucks at Camp Jackson, several miles out	125
West Scranton, Pa.—Shop and Foundry of Finch Mfg. Co.	100
Wilmington, Del.—Lea Flour Mill destroyed	80
Columbus, Ga.—Property occupied by Southeastern Compress Co.	400
Minneapolis, Minn.—Garage of Northland Tire & Repair Co.	50
Atlanta, Ga.—Machine shop of Emory University Hospital	50
Whiting, Ind.—Refinery of Standard Oil Co. of Indiana	800
Gowen, Pa.—Breaker of Buck Mountain Coal Mining Co.	125
Charleston, S. Car.—Whse. of Frederick Richards	170
Muskegon, Mich.—Muskegon Brewery destroyed	65
Atlanta, Ga.—Plant of Atlanta Milling Co.	250
E. Vandergrift, Pa.—School bldg. destroyed	50
Afton, Mich.—Campbell Stone Co. plant destroyed	80
Rice Lake, Wis.—Main lodge on Hunt property, Sissabagamo Lake.	50
Delaware, Ohio—Plant of Denison Engineering Co. destroyed	70
Lindsay, Cal.—Packing house of Lindsay Farm Bureau Fruit Assn.	100

N. F. P. A. Holds Convention

The annual convention of the National Fire Protection Association was held in Milwaukee, Wis., May 28-June 1. Reports presented by the various committees indicate that the smoking hazard is increasing due to the number of women smokers, immediate measures are necessary to curb the number of fires on large passenger liners, the reporting of fires should be made compulsory as are automobile accidents, and there is need for better fire prevention laws.

Railroads were praised for their good record in carrying inflammable materials. During the past year the only accident experienced was when a small boy crawled into a gasoline car and was overcome by gas. A man who investigated with a match blew up the car and the boy inside. Dust explosion problems were studied by the convention.

Illinois Fire College Meets June 20-23

Plans have been completed for the ninth annual fire college sponsored by the Illinois Firemen's Association to be held at the University of Illinois, Champaign-Urbana, June 20-23, with Prof. L. H. Provine, Director.

The program of the second day has been divided into three schools. The one for engineers will be in charge of Clarence Goldsmith, Assistant Chief Engineer, National Board of Fire Underwriters; Chief J. W. Just will be in charge of the inspectors' school, while Chief Harry K. Rogers and Capt. Hugh Ousley will conduct a school for those who are attending the annual college for the first time.

At the first session, Sherman V. Coultas, State Fire Marshal, will speak on "The Office of the State Fire Marshal." Richard E. Vernor, Manager Fire Prevention Department, Western Actuarial Bureau, will talk on "This Fire College."

In the afternoon instruction will be given in ladder work, sprinklers, salvage, hose, minor equipment, pumper tests, first aid, gas masks and ventilation.

The following papers and demonstrations will be presented the mornings of the third and fourth days:

"Fire Department Tactics," by William S. Rathbun, Evanston.

Open Forum conducted by Clarence Goldsmith.

"Demonstration of Common Fire Hazards," by William S. Rathbun.

"Selections from the Fire Photo Library," by Richard E. Vernor.

"Electrical Supervisory Service and Its Relation to Fire Protection," by R. E. Maginnis, Protection Engineer, Illinois District Telegraph Company, Chicago.

The afternoons will be devoted to instruction work in the use of tools and appliances. The classes will be divided into three groups to make the work more personal.

The Community Firemen's Association will have a team at the college for demonstration purposes.

On the evening of June 22, the Urbana B. P. O. Elks have arranged a stag party at the Fair Grounds Pavilion in honor of the visitors.

New Jersey Chiefs to Meet June 15

The second quarterly meeting of the New Jersey State Fire Chiefs' Association will be held at Fort Lee, N. J., in the Riviera. Talks will be given by Robert H. Seip, Safety Engineer, New Jersey Zinc Company; J. A. McCarthy, State Supervisor of Trades and Industries, and Charles H. Fischer, Consulting Engineer.

Signal Men Condemn 'Phone Advertising

The following resolution was adopted by the Municipal Signal Association at its quarterly meeting April 13 at the Hotel Stratfield, Bridgeport, Conn.:

In the Boston *Herald* of January 26, appeared an illustrated advertisement in which attention was called to the use of the telephone as means of summoning the fire department. As this advertisement is expressed it may convey the impression that the telephone is a satisfactory sole reliance in the event of fire, and its acceptance by the public as such would naturally tend to diminish the use of the fire alarm box. As the superiority of the fire alarm box over other means of transmitting fire alarm information is accepted by all who have studied the matter, it is unfortunate that its importance should be obscured. To anticipate the possibility that other telephone companies may have similar advertisements in preparation, the following resolution is presented:

Resolved: That the superiority of the municipal fire alarm box being recognized as the most dependable means of fire notification, the New England Municipal Signal Association records itself as viewing the publication of advertisements from which a contrary impression might be received, as against the best interests of fire protection.

Be it further Resolved: That representatives of this Association be appointed to confer with proper officials of the telephone companies operating within the territory represented by its membership; to explain the attitude of this Association, and to request that in future advertisements, the means supplied by the municipalities for the transmission of alarms of fire be given suitable prominence in order that their relative importance may be apparent.

Be it Further Resolved: That copies of this resolution be sent to the New Jersey Municipal Signal Association and to the New York State Municipal Signal Association, with the request, that, if the action above indicated is approved by those bodies, similar action be taken to confer with the representatives of the telephone companies operating within the territories represented by the membership of these associations.

Questions and Answers

NOTE—Readers are invited to send in questions, which will be answered in the order received. Names are omitted from questions unless otherwise specified

Hose Drying

To the Editor:

On page 317 of the April 29, 1931, issue of FIRE ENGINEERING you give a sketch of a drying rack for fire hose and, in the accompanying subject matter, state: "It can be wheeled out on the sidewalk or street and has this advantage over a tower in that the hose can be given a sun bath."

I have noticed in some of the literature published by hose manufacturers relative to the care of hose the statement is made that hose on outdoor racks should be properly protected from the sun. On the other hand I have heard drying in the sun advocated as desirable even in southern California where the sun is very hot and dry. I have therefore been somewhat puzzled by these diverse suggestions. Of course it is understood in either case that storage of hose after drying should be a location protected from the sun.

Any information or reference you can give me as to the best methods of drying and storing cotton-jacketed rubber-lined fire hose will be greatly appreciated.

My inquiry pertains more especially to 1½" hose used in connection with forest fire suppression.

J. D. C.

Answer: Cotton rubber-lined hose will serve longest if it can be kept in such a state that the cotton is thoroughly dry and the rubber lining moist.

This arrangement is, of course, impracticable.

But the hose jacket can be properly dried before it is stored, and if moisture still remains within the hose, so much the better.

The method of drying the jacket may vary in different localities. It is satisfactory to place the hose in the sun, even though it be hot, until the jacket is dried. Then it should be removed to a shady place and stored without unnecessary bends for further use.

It would probably damage the hose were it permitted to remain where the sun continually shone on it, for after the cotton jacket dried, heat would be transmitted to the lining on the inner side with the result that the rubber would gradually go through the vulcanization process.

With regard to hose towers, there is no standard design. The tower should be so arranged that there is good ventilation, no danger of water from storms coming through and striking the hose. A small electric hoist, operated from the ground floor would be of material benefit in stretching the hose up the tower.

The rack illustrated in FIRE ENGINEERING was intended for use in fire stations where no hose drying tower was provided. This rack is very satisfactory in that it provides complete drainage of the hose, eliminates folds, provides plenty of open space for ventilation and puts no strain on the coupling, such as is encountered when hose is suspended by the coupling.

Draught of Pumper

To the Editor:

Will you kindly answer the following question? Two 2½-inch lines 600 feet each from hydrant to pumper, hydrant pressure 115 lbs. How much water will pumper receive from the two lines? Hydrant on 12-inch main; pumper, same elevation as hydrant. J. E. E.

Answer: The amount of water which the two lines will furnish the pumper will depend entirely upon how much water the pumper takes. The layout you give will probably supply the engine with more water than it requires.

In any case, the lines which the engine supplies and the size of the nozzle, would determine how much water the engine would require, and hence how much it would take from the two lines supplying it.

Pump Performances

To the Editor:

How much water will a three-inch hard suction with 2½-inch couplings give a 750-gal. pumper, if the hydrant will supply the pumper?

Also, two 750-gal. pumpers are at the same plug, one a centrifugal and one a rotary; which will pump the most? Also each pumper having a plug of its own, which will throw the most water? Both are of like capacity. G. W. G.

Answer: A three-inch hard suction hose with 2½-inch coupling should be able to supply a 750-gallon pumper to its capacity, if the hydrant pressure during flow remains at or around, 40 pounds.

If the hydrant pressure drops much below this, then the suction hose may not be able to supply the pumper with its full capacity without creating a vacuum.

With reference to your second question, if the hydrant is of limited capacity, and if two pumpers are operating at the hydrant, one a centrifugal and one a rotary, it is possible that the rotary pumper would be able to draw the most water from the hydrant. This is, however, problematical, for centrifugal pumps as built today parallel very closely, from the standpoint of operating characteristics, the rotary pump.

If each pumper has a hydrant of its own, the centrifugal pump will be able to discharge the greater amount of water, if conditions are equal, for instance, if the engines have the same rated capacity, and each is pumping through short line of hose with a large nozzle. On the other hand, where long lines of hose with small nozzles are employed, there should be little or no difference between the performance of the two pumps.

Extinguisher Charges and Car Heaters

To the Editor:

Will you kindly answer the following questions? It might be well to first inform you the circumstances of the case. The station recently purchased 100 carbon tetrachloride 1 qt. fire extinguishers and gave old extinguishers in exchange for a certain consideration. In preparing these extinguishers for shipment it was necessary to remove the fluid. Now do you consider it advisable to use this old fluid in the new extinguishers as the needs arise? The fluid in these old extinguishers is anywhere from 3 to 12 months old.

Would also appreciate information on the use of the Westinghouse Automobile engine heaters, style No. 498078, 110 Volt and 200 Watt—their fire hazards, if any and whether you recommend their use. If my understanding is correct their correct use is to plug into electric light socket and then hang in automobile manifold. M. A. F.

Answer: It is good practice to discard the charging carbon tetrachloride in extinguishers. As a matter of fact, many

industrial plants recharge them once a year, discarding the old charge.

With reference to the Westinghouse Automobile engine heater, it is suggested that you check up on this heater and note if it bears the Underwriters' Laboratory label. If it does, you can be quite sure that it is safe for use as designated.

New Law Deprives Buffs of Fire Plates

Honorary chief officers, medical officers and department chaplains of the New York Fire Department are due to lose their automobile insignia on September 1, in accordance with a state-wide law recently enacted by the State legislature and signed by Governor Lehman. The law amends the penal code and makes it a misdemeanor to carry any sign, plate, insignia, etc. of any kind with the words "Fire" or "Fire Department" or "F.D.N.Y." excepting on automobiles that are owned by the department and operated by a bona fide member of the department.

The legislation was sponsored by Fire Commissioner John J. Dorman, who requested a legislator far removed from New York City to introduce the bill. Assemblyman Fayette E. Pease, a Republican of Niagara County, whose home is in Lockport, N. Y., attended to the matter for the Fire Commissioner. No New York City senator or assemblyman would sponsor the measure because of possible political reprisals by some of the influential persons affected.

Eleven medical officers who drive their own cars, five chaplains and about twenty honorary deputy chiefs will be affected. Among the latter are William F. Kenny, close friend and confidant of Al. Smith; former Congressman W. W. Cohen, a benefactor of firemen for years and founder of the Firemen's Emergency Fund; Honorary Deputy Chief Henry L. Finch, a banker and brother of Presiding Justice Edward L. Finch, of the Appellate Division; W. E. Mallalieu, General Manager of the National Board of Fire Underwriters; Sumner Ballard, Secretary of the New York Board of Fire Underwriters; former Chief John Kenlon; Jerry Daly, who has been handling publicity of the New York Fire Department for years just for the love of his hobby; Manfred L. Neumoegen, a banker whose benefactions among firemen and their families have been many; Robert H. Mainzer, a banker who has been succoring firemen and their families for 35 years, and a half dozen lesser lights.

Dr. Harry M. Archer, the only honorary medical officer of the department who has been carrying on a mission of mercy among firemen for more than forty years, is indirectly affected. He never used his automobile plates and in fact he surrendered them three years ago.

Commissioner Dorman's action took the fire buffs completely by surprise. The legislation was quietly pushed through the halls of Albany and no public notice was attracted until Gov. Lehman had signed the bill. The Fire Commissioner has told friends that there were complaints about some of the honorary chiefs disregarding traffic regulations and carrying women friends to the theatre and getting preference in traffic on the strength of the F.D.N.Y. signs on the cars. He further points to the fact that a similar law affecting the Police Department motor plates was passed several years ago. In the latter instance, it was found that the P.D. plates were being used for bootlegging and that a high police official under a former administration was taking heavy fees for the plate privilege. No such misuse was ever charged to any of the two dozen persons whose automobiles were favored with fire department insignia.

Chiefs' Plan Holds Annual Dinner

The Fire Chiefs' Emergency Plan held its fourth annual dinner at the Hotel Gramatan, Bronxville, N. Y., on the evening of Wednesday, May 17, with about 125 Chiefs and other fire department officers and a number of city and town officials in attendance. At a short meeting, the following officers were elected:

President, Chief James N. Sullivan, Greenwich, Conn.
First Vice-President, Chief J. C. Rozner, Chappaqua, N. Y.
Second Vice-President, Ex-Chief Lemon, Mamaroneck, N. Y.
Third Vice-President, James J. McGuire, Peekskill, N. Y.
Secretary-Treasurer, Captain E. Riviere, Larchmont, N. Y.
Directors, Chief H. Abbott Griffen, White Plains, N. Y.; Chief John J. Brennan, Pelham Heights, N. Y.; Ex-Chief James J. Mulcahey, Yonkers, and Deputy Chief Oscar H. Grab, New Rochelle.
Directors now in Office—Chiefs Gibson, McCullough, Outhouse and Veit.

Among the guests at the head table were Mayor Tuttle and Selectman English, of Greenwich, Conn.; Supervisor Bennett, and Fire Commissioner Murray, of Eastchester Township; Judge Hoop, of Bronxville, President of the Firemen's Association of the State of New York; Judge Kelley, of Yonkers; and others. Several of these visitors made addresses.

A handsome watch was presented to the retiring President, Chief Arthur E. Steuhl, of Eastchester Township, the presentation address being made by the new president, Chief James N. Sullivan.

An excellent entertainment was presented by William Craven, who led the singing; Oliver Smith, who sang several numbers, a juvenile dancer and the talent from "Murray's."

It was decided to hold the next meeting at Greenwich, Conn., on June 21.

Chiefs' Emergency Plan Formed in Connecticut

Connecticut now has a Fire Chiefs' Emergency Plan similar to the one that has so successfully functioned in Westchester County, N. Y. On May 9, at Glenbrook, Conn., the organization of the Fairfield County Fire Chiefs' Emergency Plan took place, at a well attended meeting. The following officers were elected:

President, Chief Victor Veit, Stamford; First Vice-President, Chief G. W. Bogardus, Norwalk; Second Vice-President, Chief F. R. Gisborne, Old Greenwich; Third Vice-President, Chief Dan Knickerbocker, Springdale; Secretary, John Moehring, Belltown; Treasurer, Assistant Chief George Breucher, Darien; Directors, Chief I. M. Hubbard, Greenwich, two years; Ex-Chief James N. Sullivan, Greenwich, two years; Chiefs F. P. Dunnigan, Westport, two years; Albert Anderson, Cos Cob, two years; J. R. Thomas, New Canaan, one year; Thomas Boyle, Noroton, one year; Harry Askew, Turn-of-River, one year, and T. F. Burns, Bridgeport, one year.

The next meeting is to be held at Stamford, Conn., on June 28.

O'Boyle Chief of St. Louis

John J. O'Boyle has been appointed Chief of the St. Louis, Mo., Fire Department. He was born May 2, 1881, and was educated in the St. Louis grade schools and at St. Louis University. He joined the Fire Department in May, 1903. In 1915 he was promoted to Lieutenant and three years later was advanced to Captain. At both of these competitive examinations he headed the list.

Chief O'Boyle has represented the Fire Department on the Pension Board and has served as delegate to the Central Trades Association.

He is single and resides with a married brother at 5225 Lexington Avenue.

Chief O'Boyle realizes that his department must practice strict economies to help the city balance its budget. He only hopes that under his guidance the Fire Department will equal its enviable standing and reputation, that it has created under previous administrations.

Chief John J. O'Boyle

Chiefs Want Rear Rail on Oil Trucks

Twenty-eight members attended the meeting of the New London Country Fire Chiefs' Association held at Fire Headquarters, Willimantic, Conn., on May 3. Chief Thomas Shipman of New London, President of the organization, was in charge of the session. The meeting went on record as favoring legislation requiring all gasoline trucks operated on the highways of the state to be equipped with a rear guard rail. It was pointed out that rear-end collissions in which such trucks are involved increase yearly. In many cases a car crashing into the rear of a tank truck will break the outlet valves or pipes, allowing the gasoline cargo to be spilled and causing a fire hazard. Resolutions favoring such legislation were drawn up and will be sent to the Commissioner of Motor Vehicles and to the Commissioner of State Police, who is also State Fire Marshal.

Make Your Reservations Now For the

I. A. F. C. CONVENTION CRUISE

IF you want to take advantage of one of those opportunities that come only once in a lifetime for most of us, make your plans now to join the members of the International Association of Fire Chiefs on their gloriously unique Great Lakes Convention Cruise and Visit to the World's Fair, leaving Cleveland on the palatial steamer Seeandbee August 21st and returning August 27th. The Association, through its President, Richard L. Smith, extends an invitation to all fire chiefs, their families and friends, as well as others interested directly or indirectly in any phase of the fire service, and everybody is heartily welcome whether a member of the I.A.F.C. or not.

The boat, the largest and finest on the Great Lakes, has been chartered exclusively for this convention party, thereby making possible the remarkably low rates for the trip and assuring a genial get-together. Six days of delightfully cool and restful sailing, with a two-day stopover at Chicago for the World's Fair—what could be finer! And the whole cost, including practically everything is only $55 and up.

Itinerary of the Trip

Monday, August 21—Leave Cleveland.....2:00 P. M.
The steamer enters Lake Huron and proceeds to Georgian Bay, cruising through its many islands.

Tuesday, August 22—Arrive Midland, Ontario.....3:00 P. M.
Leave Midland, Ontario.....8:00 P. M.
Late afternoon and early evening at Midland. Opportunity for sightseeing and outdoor sports.

Wednesday, August 23—Continue through Lake Huron and into Lake Michigan.

Thursday, August 24—Arrive Chicago.....7:00 A. M.
Friday, August 25—Leave Chicago.....6:00 P. M.
These two days in Chicago allow ample opportunity to visit World's Fair, for which special bus service will be provided. We will sleep and have all meals on the boat which does away with the need of going to a hotel.

Saturday, August 26—Arrive Mackinac Island.....1:00 P. M.
Leave Mackinac Island.....5:00 P. M.
A program of entertainment will be arranged including motor-boat racing, Coast Guard Exhibition and trotting races.

Sunday, August 27—Arrive Cleveland.....6:00 P. M.

The All-Expense Rates

Following are the rates per person for the entire cruise, including all meals: Inside Rooms $55; Outside Rooms $65; Outside Rooms with Toilet $80; Double-bed Parlors with Bath $95; Twin-bed Parlors with Bath $100. (These rates provide for two persons in each room. Half rates for children under 12 years of age.)

Reduced railroad rates from practically all points to Cleveland and return have been authorized. Round trip tickets will be sold on basis of one and one-third of regular one way fare. Identification certificates, to be presented at local R.R. office when buying tickets, will be forwarded in due course.

For those who plan to drive to Cleveland in their own cars, adequate garage facilities will be made available near the boat pier at very nominal cost.

Large Party Anticipated

From all indications, the trip promises to be an outstanding success. Those in charge of the arrangements report a large number of reservations and inquiries being received from all parts of the United States and Canada. Following are some of the bookings already made:

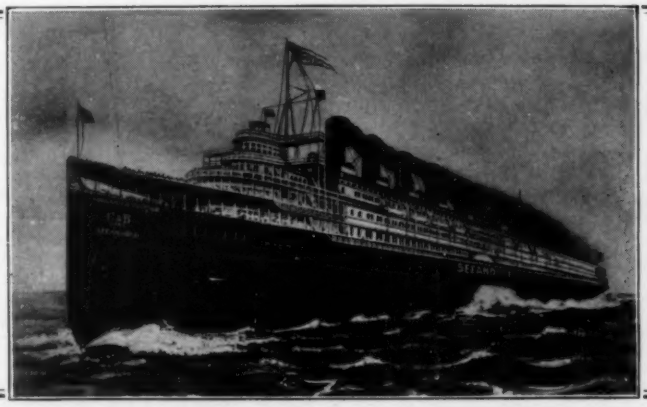
Long Beach, Calif. Fire Department Band—13 persons; Charles E. Comins—Warren, Mass.; I. Walter Moore—Warren, Mass.; Paxton Mendelssohn and One—Detroit, Mich.; Mr. and Mrs. J. N. Sullivan—Utica, N. Y.; Mr. and Mrs. Ernest G. Beckert—West New York, N. J.; Mr. and Mrs. Albert Chamberlain—Hillside, N. J.; Ray W. Smith—Atlanta, Ga.; C. M. Johnson—Boston, Mass.; Duncan McPherson—San Diego, Cal.; Mr. and Mrs. Russell L. Dyche and Two Children—London, Ky.; James J. Mulcahy—Yonkers, N. Y.; Mr. and Mrs. Harry Belknap—Boston, Mass.; Miss Nell J. Anthony—Boston, Mass.; J. C. Schellin—Wooster, Ohio; Frank M. Davis—Danville, Ill.; Mr. and Mrs. John J. Towey—Newark, N. J.; C. J. Beatty—Jamestown, N. Y.; Miss Violet E. Tyler—Jamestown, N. Y.; Mr. and Mrs. Walter Gibson—Newark, N. J.; W. B. Peckinpaugh—Wooster, Ohio; C. B. Bradford—Rome, Ga.; Charles A. McGinley—E. Orange, N. J.; Jethro Gibbs—Montclair, N. J.; Burris Hensley—Cincinnati, Ohio; David Caldwell—Cincinnati, Ohio; Mr. and Mrs. Charles A. Delaney—Lakewood, Ohio; Mr. and Mrs. H. Collins—Louisville, Ky.; Walter H. Pierce—Arlington, Mass.; Mr. and Mrs. John Gibson—Mt. Vernon, N. Y.; Mr. and Mrs. Edward N. Gresselman—Syracuse, N. Y.; J. H. Green and One—New York, N. Y.; Thomas F. Burns—Bridgeport, Conn.; Chief Richard Smith and Wife—Pittsburgh; Chief Frederick C. Decker—Westfield, N. J.; Mr. and Mrs. Wm. E. Ingold & Son—Edgewater, N. J.; F. M. Sargent—Sunapee, N. H.; Mr. and Mrs. D. A. Boulden—Winnipeg, Canada; Mr. and Mrs. H. A. Golt—Dover, Del.; I. H. Case—New York, N. Y.; Fred Shepperd—New York, N. Y.; Sherwood Brockell, Raleigh, N. C.; Geo. Morley—Gamewell Co., Newton, Mass.; John J. T. Waldron—New York; John J. McElligott—New York; W. H. Joynes—Richmond, Va.; J. A. Raffo—Richmond, Va.; J. A. Fisher—Annapolis, Md.; W. W. Withers—Washington, D. C.; P. G. Priester—Baltimore, Md.; Howard Travers—Baltimore, Md.; H. W. McTheney—Cumberland, Md.; W. T. Wechmeyer—Cumberland, Md.; Richard Baughn—Norfolk, Va.; James Fearn—Washington, D. C.

Reservations Should Be Made at Once

Join the party and bring your family and friends, but make your reservations without delay, while the choicer accommodations are available. Bookings will be handled in the order received—first come, first served. For reservations write American Express Company, 65 Broadway, New York. (If you expect to go but aren't quite sure yet, you can make a tentative reservation).

For any further information write to I. H. Case, Chairman of Convention Arrangements, International Association of Fire Chiefs, 24 W. 40th Street, New York.

THE S.S. SEEANDBEE has practically all the conveniences of a modern hotel or ocean liner. It is five hundred feet long, one hundred feet wide, and its five hundred staterooms will comfortably accommodate one thousand persons. Staterooms are all equipped with running water and telephone. Rooms with private bath have brass bedsteads. The steamer has three



sleeping decks and a large promenade on the upper deck, large public rooms, and plenty of space for open air recreational activities. The dining room is large and airy. The room in which the convention meetings will be held easily accommodates 800 persons. It will be equipped with loud speakers, special lighting, and whatever else is necessary for the occasion.

New England Chiefs To Have 3-Day Convention

The New England Association of Fire Chiefs has returned to its former custom of three-day conventions. The opening and the memorial exercises will be held in the chapel of Bates College. Other sessions will be held in the Lewiston Armory, the largest in the state. The banquet will be held Tuesday evening, June 20, and will be attended by Governor Brann, of Maine, and other noted speakers.

Among the well known persons who will address the convention are Thomas F. Dougherty, Assistant Chief, New York Fire Department; Chief Peter Steinkellner, Milwaukee, Wis.; T. Alfred Fleming, Director of Conservation, National Board of Fire Underwriters; T. Z. Franklin, Manager, Special Hazards, Automobile Insurance Company, Hartford, Conn.; James M. Hurley, Massachusetts State Fire Marshal; George O. Mansfield, Chief Fire Inspector, Massachusetts; Alfred N. Miner, Vice-President, Massachusetts Safety Council; William J. Carroll, Rockwood Sprinkler Company; M. C. Hutchins, Massachusetts Fire Warden; Neil Violette, Forest Commissioner, Maine, and Chief John C. Moran, Hartford, Conn.

Request for rooms should be sent to George W. Austin, Room 205, 170 Summer Street, Boston. There will be special entertainment features for the ladies. Chief Koltonski urges that the ladies be brought to the convention.

Two Fire Fans Who Will Welcome Chiefs

Chiefs who will attend the annual convention of the New England Association to be held in Lewiston, Me., June 20-22, will have the opportunity of meeting two well known fire fans.

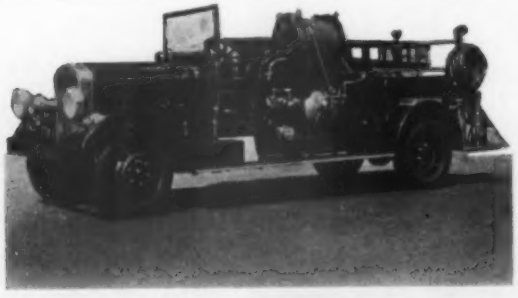
Ed Ramsdell, Assistant Engineer, Lewiston, has spent most of his spare time in fire stations ever since he was a boy. In 1889 he went to Boston for the big fire on Thanksgiving Day when fifty steamers were at work. He believes that that was the greatest sight he ever saw. Mr. Ramsdell is Chairman of the Exhibits Committee.

Dr. Joseph W. Scannel, a noted surgeon, is also Fire Commissioner of Lewiston. He has been physician to the fire-fighters for many years.

Buffs in Philadelphia Organize

A selected group of fire fans of Philadelphia, Pa., have formed the Box 91 Associates. This box number was selectd as it is the one from which most of the extra alarms are turned in. Membership is limited to fifteen members and ten honorary members. Dr. Harold T. Antrim, member of the National Association of Police and Fire Surgeons was elected as the first President. The club meets the second Tuesday of each month.

The Metropolitan Firemen's Post Band of the American Legion arranged an excursion from Boston, Mass., to Washington, D. C., for the inauguration ceremonies. The party consisted of over five hundred persons including the seventy-two-piece firemen's band. This band had the honor of leading the third division in the Inaugural Parade. James E. Sullivan, of the Everett, Mass., Fire Department had charge of the arrangements.



St. Paul, Minn., Mounts Old Equipment on New Chassis
A new Luverne chassis and 750-gallon pump were supplied to St. Paul, Minn., on which the fire department mounted equipment from an old American-LaFrance chemical and hose car of which the chassis was obsolete. The installation of the old equipment and the painting of the entire job was done in the St. Paul Fire Department Shops.

Thomas R. Johnstone Dead

Thomas R. Johnstone, nationally known fire apparatus and equipment salesman residing in Indianapolis, Ind., shot himself through the head on May 11, while standing in front of a mirror in his home. He was sixty-nine years old.

He had been in ill health for years suffering from asthma. Last summer he was accidently poisoned by carbon monoxide gas fumes in the garage at his home. A crew of the Indianapolis Fire Department revived him with the aid of an inhalator which he had sold to the department. Since that accident, Mr. Johnstone's health was impaired and on several occasions he threatened to commit suicide.

The Late T. R. Johnstone

Mr. Johnstone had charge of sales of Stutz fire engines for three years and for twenty years was connected with the American LaFrance organization.

He was born in Scotland and came to this country when he was twenty years old. He settled in Minnesota and at one time was Chief of the Crockston, Minn., Fire Department. During the world war he served with the British and Canadian recruiting service in Chicago.

Mr. Johnstone was a member of the Mayfair Lodge, F. & A. M. in Chicago, the Shrine and Scottish Rite in Duluth, Minn., and the Order of Eastern Star. He was widely known as a horse show judge and served at the Indiana State Fair for several years.

He is survived by his widow, five daughters, two sons and nine grandchildren.

Del-Mar-Va Firemen Hold Convention

General Smedley D. Butler, formerly of the U. S. Marine Corps, was one of the speakers at the fourth annual convention of the Del-Mar-Va Volunteer Firemen's Association held May 10 at Easton, Md. Others who spoke were Howard Travers, Chief of Baltimore Fire Department, William J. Lutz, Chief of Wilmington, Del., and George W. Colborn, Jr., Chief of Princess Anne, Md., Fire Department and formerly President of the Maryland State Firemen's Association and the Del-Mar-Va organization. The convention closed with a parade and dance. Ralph Hayes of Dover, Del., was elected President and Fred Brown of Minquadale, Del., Secretary. The 1934 gathering will be held in Lewes, Del.

Chief MacMillan on Sick Leave

H. R. MacMillan, Chief of Jacksonville, Fla., Fire Department has been granted a leave of absence for three months to regain his health. He will spend the time with his son, Chief J. F. MacMillan of Cocoa, Fla., Fire Department. Deputy Chief W. Q. Dowling has been named Acting Chief of Jacksonville.

D. G. Aid.

Box 13 Formed in Cincinnati

Fire fans of Cincinnati, Ohio, held a meeting on May 9 and formed the Box 13 Association. Chief Houston was present and gave an interesting talk. Considerable help in forming this group was obtained from Bob Anderson, of the Box 7 Association of Dayton, and Paxton Mendelssohn, of Detroit's Box 12 Association.

William A. Berry, Engineer and Assistant Chief, Danvers, Mass., Fire Department, presented his resignation after serving for fifty years. He stated that he was following doctor's orders.

Chief John H. Espey, head of the Elmira, N. Y., Fire Department, will observe his forty-sixth year as a fire-fighter and twenty-nine years as Chief, on June 27. He has served as President of the New York State Fire Chiefs' Association, and is Honorary Chief of Elmira Heights.

Indian Pumps Favored in Forests

Due to increasing interest in the conservation of natural resources, more attention is being paid to the prevention of fires in forests. Indian fire pumps, which are worn on the backs of fire-fighters, have been found ideally suitable for the control of forest, grass, brush and field fires. The manufacturers, D. B. Smith & Co., Utica, N. Y., report added interest in these portable pumps.

Indian Fire Pump in Use

Hospital Damaged

The lives of 225 patients were endangered by a fire of undetermined origin which swept the Robert Packer Memorial Hospital at Sayre, N. Y. Companies from Elmira, Athens and Waverly aided the local department. Ten minutes after the fire started, the lighting system failed.

The more seriously ill of the many patients taken from the building were removed to the Tioga General Hospital. Many private homes were opened to care for the patients.

Mississippi State Firemen Meet

Plans are under way to revive the Mississippi State Firemen's Association. At a meeting held in Hattiesburg on May 8, sixteen towns and cities in the state were represented with an attendance of 165. Talks were given by Hon. Thomas L. Bailey, Speaker of the House of Representatives; E. E. Blount, State Fire Marshal; J. F. Watkins, Vice-President, I. A. F. F., and Holt E. J. Rose. Resolutions were adopted favoring the enactment of civil service regulations, and the adoption of the double platoon system in all paid fire departments. The next meeting will be held in Gulfport in the fall.

Battery Chargers Successful in Fire Department

Up to 1931, the Cincinnati Fire Department has maintained a staff of several men for repairing and charging batteries of fire apparatus. As a means of cutting down this maintenance cost, W. C. Beckner, Superintendent of Fire House Maintenance, tried a Tungar battery charger. At present forty such chargers are used in thirty-six fire stations.

The service of the battery men have either been dispensed with or the men have been given other jobs. The 6-ampere Tungar charge is placed on the running board of the fire apparatus and is connected to the battery. The proper specific gravity for the battery electrolyte is attained in a short time.

Because of the heavy demands made upon batteries by fire apparatus, due to the load created by frequent motor starting and large floodlights, such batteries must be charged frequently. The Tungar charger has made it more convenient to make these charges.

A motor pumper has been purchased by East Rushville, Pa. Water will be drafted from large cisterns about the village.

The erection of a drill tower and the purchase of a new fire engine, was recommended by Chief Thomas L. Coyle of Paterson, N. J., in his annual report.

Chief Henry Lecocq, of Marshfield, Ore., in his annual report recommends that the city employ a fire inspector to make at least a yearly examination of the residential area, and a monthly inspection of the business section. He said that the reduction in insurance rates already gained would pay for the inspector's salary.

Fire College Trains Arizona Firemen

The Educational Committee of the State Firemen's Association, the State Department of Vocational Education and the public schools throughout the state are cooperating in a program called the Arizona State Fire College to train Arizona firemen. For the Chiefs the work will be carried through a group conference method. Officers will be trained at three different centers in the state, automotive instruction will be carried on through the aid of local garage mechanics and traveling instructors.

The training of firemen will cover the subjects of building inspection and fire prevention, fire control, salvage, first aid and rescue, drills, hose and equipment, care of quarters and apparatus, fire chemistry and hydraulics and arson investigation.

The work will be carried on by two traveling instructors who will spend two weeks in each locality holding meetings for two and one-half hours each night with the exception of Saturday and Sunday. During the day the instructors will carry on fire prevention work in the community.

At first only two subjects will be covered throughout the state and in the future it is planned to cover three subjects each year.

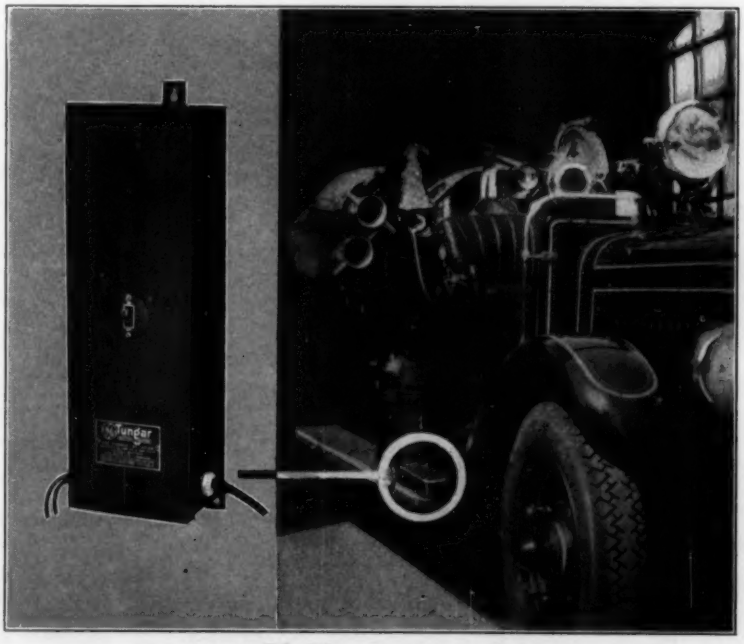
For example, the subject of fire prevention and building inspection covered interior and exterior inspections, special inspections, residential district inspections, inspection of public buildings and places of public assembly, laws, records and reports and public relations.

Stock of Auto Tires Destroyed

A stock of automobile tires in Detroit, Mich., valued at $150,000 was destroyed when the five-story building in which it was housed was badly damaged by a two-alarm fire. Fire broke out on the fifth floor and worked towards the ground.

The first alarm brought three engine companies, one truck company, one rescue squad and a high pressure wagon. The second brought two additional engine companies, one truck company, a rescue squad, a water tower, and a high pressure wagon. Heavy streams with large tips were used, and it was possible to work close to the burning building.

Edward H. Warr, Chief of the Baltimore Salvage Corps, has been appointed Second Vice-President of the Eastern Association of Fire Chiefs to fill the unexpired term of Ex-Chief August Emrich, of Baltimore.



Two Views of the Tungar Battery Charger
Left—Tungar battery charger and right, charger placed on running board of fire apparatus to charge the apparatus battery.

PROPOSED IMPROVEMENTS

Bourne, Mass.—Plans completed for erection of central fire station, according to reports.

Lawrence, Mass.—Fire Chief Francis A. Sullivan advocates the erection of an additional fire station in the Clover Hill district.

East Orange, N. J.—Reports state city council considering passing ordinance providing for considerable public improvements, including erection of a new fire headquarters, purchase of fire apparatus and installation of new fire alarm system.

Rock Island, Ill.—City may consider plans for raising funds for purchase of a new chief's car and pumper for the fire department. Clarence E. Hodson, Mayor.

Independence, Iowa.—Reports state purchase of fire truck was discussed at recent meeting of city council. A. M. Norton, City Clerk.

Fergus Falls, Minn.—State Underwriters Inspection Bureau recommended purchase of hook and ladder truck and a new 1,000 gal. pumper for the fire department. Estimated cost $15,000.

Ben Lomond, Cal.—At recent meeting local fire department discussed erection of new fire station.

FIRE BOAT For Sale

A 26 foot Sea Sled Fire Boat with a 220 H.P. Engine and a model "B" Northern Pump—rated at 750 G.P.M. (no extra equipment). For further information and price write: Box No. 710, c/o FIRE ENGINEERING, 24 West 40th St., New York.
5

FOR SALE

Good used American LaFrance Chemical and Hose truck—equipped. Can be seen and tried out at any time. Apply: Gus L. Day, Mendham, New Jersey.
6

CONVENTION DATES

June 10—FIRE CHIEFS' CLUB OF RHODE ISLAND. Next Meeting, Estate of Senator William H. Vanderbilt, Oakland Farm, Portsmouth, R. I. Secretary, A. Robert Black, 71 Wellesley Ave., No. Providence.

June 12-14—KANSAS STATE ASSOCIATION OF FIRE CHIEFS, STATE FIREMEN'S ASSOCIATION AND FIRE SCHOOL. Respectively, 17th, and 46th Annual Convention and 5th Annual Fire School, Wichita, Kan. Secretary, Chief K. D. Doyle, Wamego, Kan. Secretary, Firemen's Short Course, E. J. Stewart, Kansas Insp. Bureau, 701 Jackson St., Topeka, Kan. Also the Associations will conduct ten one-day regional fire schools in ten different towns-First one in Chanute, Kan., latter part of April.

June 13-14—MINNESOTA STATE FIRE DEPARTMENT ASSOCIATION. 61st Annual Convention, St. Paul, Minn. Secretary, Fred Pfaender, New Ulm, Minn.

June 13-15—TEXAS STATE FIREMEN'S AND FIRE MARSHALS' ASSOCIATION. 57th Annual Convention, Corpus Christi, Tex., Secretary-Treasurer, Olin Culberson, Edna, Tex.

June 13-15—FIRE CHIEFS' ASSOCIATION OF OHIO. 16th Annual Convention, Mansfield, Ohio. Secretary-Treasurer, Chief Philip J. Harty, Youngstown Sheet & Tube Company, Youngstown, Ohio.

June 14-16—MARYLAND STATE FIREMEN'S ASSOCIATION. 41st Annual Convention, Westminster, Md. Secretary, George R. Lindsay, Hagerstown, Md.

June 14-16—WISCONSIN STATE FIREMEN'S ASSOCIATION. 46th Annual Convention, New Glarus, Wis. Secretary, E. Philip Mueller, Jefferson, Wis.

June 15—NEW JERSEY STATE FIRE CHIEFS' ASSOCIATION. Quarterly Meeting, The Riviera, Fort Lee, N. J. Secretary, Fred. A. Trowbridge, Morristown, N. J.

June 20-21—ILLINOIS FIRE COLLEGE. 9th Annual Fire College, Illinois Firemen's Association, at University of Illinois and Grounds and Tower of Association, Champaign, Ill. Secretary, Assist. Chief Roy W. Alsip, Champaign, Ill. Director, Prof. L. H. Provine.

June 20-22—HUDSON VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 44th Annual Convention, Yonkers, N. Y. Secretary, Chief Chris. W. Noll, Poughkeepsie, N. Y.

June 20-22—NEW ENGLAND ASSOCIATION OF FIRE CHIEFS. 11th Annual Convention, Lewiston, Me. Secretary-Treasurer, Chief John W. O'Hearn, Watertown, Mass.

June 21—FIRE CHIEF'S EMERGENCY PLAN. Next meeting, Fire Headquarters, Greenwich, Conn. Secretary-Treasurer, Capt. E. Riviere, Fire Headquarters, Larchmont, N. Y.

June 21—NORTHEASTERN OHIO VOLUNTEER FIREMEN'S ASSOCIATION. 60th Annual Convention, Hicksville, Ohio, President Chief Darrell Williams, Sylvania, Ohio.

June 28—FAIRFIELD COUNTY FIRE CHIEFS' EMERGENCY PLAN. Next meeting, Fire Headquarters, Stamford, Conn. Secretary, John Moering, Belltown, Conn.

June 23-24—EASTERN ASSOCIATION OF FIRE CHIEFS, 6th Annual Convention, Penn-Harris Hotel, Harrisburg, Pa. Secretary, Chief F. E. Soulé, Coatesville, Pa.

June 26-29—COLORADO STATE FIREMEN'S ASSOCIATION. 17th Annual Convention, Estes Park, Col. Secretary, Clinton Turnbull, 303 Jacobson Bldg., Denver, Col.

June 28—CENTRAL WESTERN FIREMEN'S ASSOCIATION. Annual Convention, Miamisburg, Ohio. Secretary, A. Hetzel, Miamisburg.

July—VERMONT STATE FIREMEN'S ASSOCIATION. 43rd Annual Convention, Poultney, Vt. (Exact date to be set later.) Secretary-Treasurer, Spencer Carr, Poultney, Vt.

July 1—TEMISKAMING FIREMEN'S ASSOCIATION. Tournament, New Liskeard, Ont., Can. Secretary-Treasurer, F. E. Thompson, New Liskeard, Ont.

July 10-12—FLORIDA FIRE COLLEGE. 4th College, Daytona Beach, Fla. Under direction of J. F. MacMillan, Cocoa, Fla.

July 11-12—QUEBEC POLICE AND FIRE CHIEFS' ASSOCIATION. 1st Annual Convention, Montreal, Que. Secretary-Treasurer, Robert Harrington, Chief Fire Department, McColl-Frontenac Oil Co., Ltd., Windsor Hotel, Montreal.

July 17-20—MICHIGAN STATE FIREMEN'S ASSOCIATION. 59th Annual Convention, Lansing, Mich. Secretary-Treasurer, H. L. Williams, Ludington, Mich.

July 17-20—TEXAS FIREMEN'S TRAINING SCHOOL. 4th Annual Session, A. & M. College, of Texas, College Station, Tex. Director H. R. Brayton, College Station.

July 18-19—MARITIME FIRE CHIEFS' ASSOCIATION. 19th Annual Convention, Digby, N. S., Can. Secretary-Treasurer, Captain Kenneth J. MacRae, Puggsley Bldg., St. John, N. B.

July 20-22—WEST VIRGINIA VOLUNTEER AND PAID FIREMEN'S ASSOCIATION. Annual Convention, and Fire School, Romney, W. Va. Secretary, W. V. Long, Keyser, W. Va.

July 20-22—MONTANA STATE FIREMEN'S ASSOCIATION. 42nd Annual Convention, Havre, Mont. 3rd Firemen's Short Course, to be held at Bozeman, date not yet set. Secretary-Treasurer, D. E. Moser, Bozeman, Mont.

July 24-27—WEST VIRGINIA FIRE SERVICE EXTENSION SCHOOL. 3rd Extension School, University of West Virginia, Morgantown. Secretary, Chief C. J. Powell, Romney, W. Va.

July 24-28—WEST VIRGINIA FIRE CHIEFS' ASSOCIATION. 2nd Annual Meeting, University of West Virginia, Morgantown. Secretary, Chief C. J. Powell, Romney, W. Va.

Aug. 1-3—WISCONSIN PAID FIREMEN'S ASSOCIATION. 26th Annual Convention, Green Bay, Wis. Secretary-Treasurer, William H. Schultz, Sheboygan, Wis.

Aug. 7-9—MICHIGAN STATE FIRE CHIEFS' ASSOCIATION. 8th Annual Convention. Traverse City, Mich. Secretary, George F. Dansbury, Grosse Pointe Farms, Mich.

Aug. 8—MASSACHUSETTS PERMANENT FIREMEN'S ASSOCIATION. 21st Annual Convention, Hotel Nonotuck, Holyoke, Mass. Secretary, W. Fred Thomas, Worcester, Mass.

Aug. 8-11—STATE FIRE CHIEFS' ASSOCIATION OF VIRGINIA. 5th Annual Convention, Harrisonburg, Va. Secretary-Treasurer, Chief E. H. Rouse, Orange, Va.

Aug. 8-11—VIRGINIA STATE FIREMEN'S ASSOCIATION. 47th Annual Convention, Harrisonburg, Va. Secretary, O. W. Dabney, Staunton, Va.

Aug. 15-18—FIREMEN'S ASSOCIATION OF THE STATE OF NEW YORK. 61st Annual Convention, Poughkeepsie, N. Y. Secretary, Fred A. Davis, Fort Edward, N. Y.

Aug. 21-27—INTERNATIONAL ASSOCIATION OF FIRE CHIEFS. 61st Annual Convention, on board Steamer "Seeandbee," for Cruise on Great Lakes. Secretary-Treasurer, Ex-Chief James J. Mulcahey, 16 Franklin Avenue, Yonkers, N. Y.; Executive Secretary, Jay W. Stevens, Merchants' Exchange Bldg., San Francisco, Cal.

Aug. 22—MISSOURI VALLEY ASSOCIATION OF FIRE CHIEFS. Annual Convention 2nd day of I. A. F. C. Convention, on Board Steamer "Seeandbee." Secretary-Treasurer, Chief Ray Tiller, Waterloo, Ia.

Aug. 29-31—DOMINION ASSOCIATION OF FIRE CHIEFS. 35th Annual Convention, Peterborough, Ont., Can. Secretary, Chief James Armstrong, Kingston, Ont.

Sept.—ARKANSAS STATE FIREMEN'S ASSOCIATION. 12th Annual Convention, Eureka Springs, Ark. (Exact date to be decided later.) Secretary-Treasurer, H. D. Compton, Little Rock, Ark.

Sept.—OKLAHOMA STATE FIREMEN'S ASSOCIATION. 39th Annual Convention, Oklahoma City, Okla. (Exact date to be decided later.) Secretary-Treasurer, Charles Slemp, 820 East 19th St., Oklahoma City.

Sept.—NORTHWEST FIRE SCHOOL. 6th Annual Fire School, exact date not set, but probably in September, as usual. University of Minnesota, Minneapolis. Address, Chief Frank W. Fuller, Brainerd, Minn.

Sept. 5-7—KENTUCKY STATE FIREMEN'S ASSOCIATION. 14th Annual Convention, Pikeville, Ky. Secretary, Capt. S. G. Render, 940 Starks Bldg., Louisville, Ky.

Sept. 12-14—WISCONSIN STATE FIRE CHIEFS' ASSOCIATION. 5th Annual Convention, Wisconsin Rapids, Wis. Secretary, Chief Arthur J. Rahn, Two Rivers, Wis.

Sept. 18-19—MISSOURI ASSOCIATION OF FIRE FIGHTERS. 9th Annual Convention, Kansas City, Mo. Secretary-Treasurer, M. J. Mulvoy, 405 City Hall Building, St. Louis, Mo.

Sept. 19-20—IOWA FIREMEN'S ASSOCIATION. 56th Annual Convention, Denison, Ia. Secretary, Paul A. Soener, Independence, Ia.

Sept. 21-22—DELAWARE VOLUNTEER FIREMEN'S ASSOCIATION. 13th Annual Convention, Laurel, Del. Secretary, Sam H. Carson, Dover, Del.

Oct. 2—TEMISKAMING FIREMEN'S ASSOCIATION. 10th Annual Convention, New Liskeard, Ont., Can. Secretary-Treasurer, F. E. Thompson, New Liskeard, Ont.

Oct. 3-5—PENNSYLVANIA STATE FIREMEN'S ASSOCIATION. 54th Annual Convention, Lock Haven, Pa. Secretary, Charles E. Clark, Wayne, Pa.

Oct. 17-19—ILLINOIS FIREMEN'S ASSOCIATION. 47th Annual Convention, Rockford, Ill. Secretary, Assist. Chief Roy W. Alsip, Fire Department, Champaign, Ill.

Oct. 17-19—NEBRASKA STATE VOLUNTEER FIREMEN'S ASSOCIATION. 51st Annual Convention, North Platte, Neb. Secretary-Treasurer, Fred W. Muller, Norfolk, Neb.

May 9, 1934—DEL-MAR-VA VOLUNTEER FIREMEN'S ASSOCIATION. 5th Annual Convention, Lewes, Del. Secretary, E. C. Bailey, Laurel, Del.

Department and Other Reports Received

Seattle, Wash.—Forty-first annual report of the Fire Department of Seattle, Wash.; 128 pages and cover.

Amsterdam, Holland—Annual report of Fire Department, Amsterdam, Holland; twenty-eight pages and cover.

South Dakota Fire Marshal—Twenty-fifth annual report of the State Fire Marshal, South Dakota; twenty-two pages and cover.

Pennsylvania Firemen's Association—Report of the fifty-second annual convention of the Firemen's Association of the State of Pennsylvania, held in Wilkes-Barre; 120 pages and cover.

New Mexico Fire College—Proceedings of the tenth annual convention and the third annual fire college of the New Mexico State Firemen's Association held in Raton; illustrated, sixty pages and cover.

Chief!

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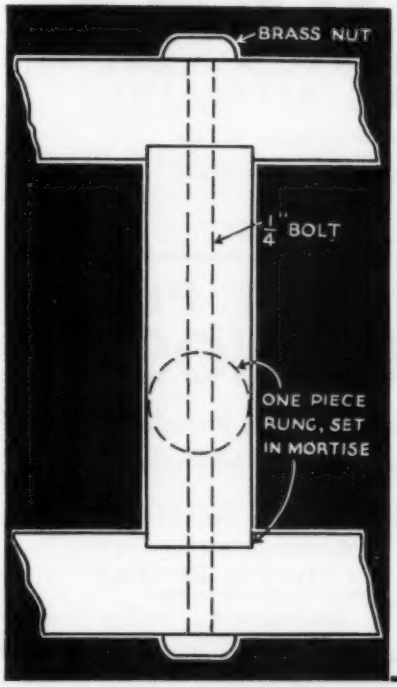
TRUSS LADDERS

with these important features



(1) Truss Rungs Set in Straight Line. This means greater safety, greater efficiency. The rungs are turned from one solid piece of well seasoned hickory, which means that rungs can't dry up and loosen in their sockets. The top section rests on all rungs *evenly*. The ladders will not bind,—they are always free to slide. They are so made that they can't sag at the ends.

(2) Less distance between laps.

(3) Less vertical banking space required.

Practical chiefs will welcome this new "DUO" truss ladder as a definite advancement in ladder construction. Note how the rungs are set into the rail and truss. Everything about the "DUO" ladder gives you greater strength and safety.
We suggest you send now for literature and prices on the "DUO" and be sure to ask about our combination ladder which combines five ladders in one. No obligation in writing—literature will be mailed to you gladly.

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AFTER all, a good badge is a sensible investment. Not everyone can wear a fireman's emblem of service. You men who have devoted your lives to saving life and property should be proud of your badge.
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Catalog on request.
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Standard for Over Fifty Years

The Chief Says—

"The more we use these INDIAN FIRE PUMPS the more we like them. It's the only outfit we've ever found that seems to be just right for brush, rubbish, grass, spot and awning or roof fires. The low price is a big item with the reduced budgets this year, too. You'd better order a supply today for those grass fires and for many other uses."

THE SMITH
INDIAN
FOREST FIRE PUMP

COMBINATION BRASS NOZZLE FOR 50 FOOT STREAM OR LONG COARSE SPRAY
COMBINATION BRASS HANDLE FOR CARRYING TANK AND FOR HOLDING PUMP
EXTRA HEAVY TANK IS FORM FITTING TO FIT BACK SNUG AND FIRM
ALL TANK JOINTS LOCKED AND SOLDERED
BUILT STRONG
PATENTED
FORM-FITTING, VENTILATED SHIELD GIVES A CONSTANT CIRCULATION OF AIR BETWEEN WATER TANK AND CARRIER'S BACK. IT PROTECTS THE BACK FROM THE COLD WATER AND MOISTURE IN THE TANK AND KEEPS THE BACK WARM AND DRY.

Let us send you descriptive matter and prices on our fire pump line. THE INDIAN FIRE PUMP, with its running board truck carrying rack, is an extinguisher combining the ideas of foremost authorities on brush and grass fires.

The fact that it uses only clear water—no chemicals—is important in these days of economy. INDIANS are built strong without any parts to wear out or give trouble.

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FIRE PUMPS
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Hale design is being imitated but not equalled.
You can get Hale quality, efficiency and long, effective life only by buying Hale pumps.

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FIRE ALARM
SIRENS
GENERAL ALARM, CODE, APPARATUS
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THE STERLING SIREN FIRE ALARM CO., INC.
60 Allen Street Rochester, N. Y.

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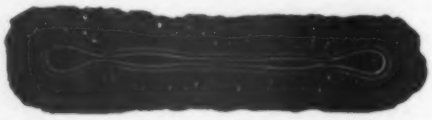

The one hose that does not require frequent replacements. Always reliable for fire service no matter how old, if the jackets are intact.
Lined with three rubber tubes, specifically guaranteed for six years.

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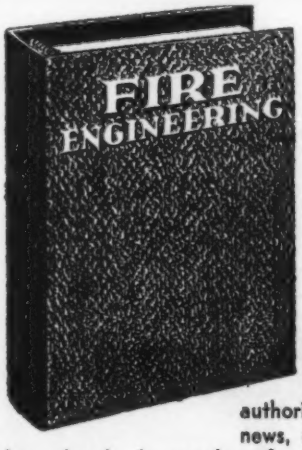

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THE FIRE SERVICE INSTRUCTOR

The Twelfth Installment of a Treatise to Aid Those Responsible for Training Men in the Fire Service to Develop a Systematic Type of Teaching

By O. D. Adams

State Director for Vocational Education in Oregon and Prof., Industrial Education, Oregon State College and

Edward L. Boatright

Battalion Chief, Portland, Ore., Fire Department, and Director, Portland Fire College

Chapter IV (Continued)—Helps in Teaching

Fire Alarm Systems—Blanktown Fire Alarm System (Continued)

UPON receipt of the alarm one operator goes to the register recording the alarm to check the box. The other operator checks the alarm on the master register on his desk and counts the flashes on the circuit lamp, also bells which ring corresponding to the box number. The alarm comes in at the rate of two blows a second, a one-second interval between the numbers and three one-second intervals between rounds, there being four complete rounds of the box, which are sent out at the same rate as received.

One operator reads and calls the alarm on the circuit register and if it compares with the master registers at the end of the second round of the box coming in, the desk operator pulls the transmitter and the box goes out to the engine houses for three rounds.

The Fire Bureau maintains Electric Service connections with the Electric and P. E. P. Company; in case one Service Supply fails we can rely upon the other. We still have in reserve another source of supply available for approximately 36 hours which consists of a series of Storage Batteries located in the basement of the F. A. T. Headquarters. Another means of reserve supply could be accomplished by the hooking up of gasoline-driven motors to generator sets.

The A. D. T. Alarm System

The American District Telegraph Service, commonly called the A.D.T. Protection, operates a manual fire box service. The main operator's office and switchboard is on the second floor of the Lumbermen's Building at 3rd and Water Streets. The manual box, with which you no doubt are familiar, operates on a closed circuit and is a small iron box with a glass front protecting a lever. In the box there is a character wheel of construction similar to the one in our fire alarm box. When this wheel starts to turn it opens and closes the circuit, sending the alarm to the A.D.T. office, where there are relays somewhat similar to those in the central fire alarm headquarters.

When the alarm is received, a light flashes on the circuit board, showing the circuit the box is on; the alarm comes in on the register seven times, each round being followed by the signals "dot-dash-dot," which is the Morse Code for the letter F indicating "fire." The A.D.T. operator compares the box number with his index book, which shows the location of the building and the place in the building where the box is pulled.

He then sets up the box number on a small transmitter and pulls the handle which registers the alarm on the tape at the fire alarm headquarters. The operator there also has a card index showing the location of the building and the assignment of all companies responding nearest to that location. In the meantime, the A.D.T. operator calls the fire alarm telephone operator over a direct wire from his office to the telephone fire alarm board and transmits the alarm over the telephone, giving the exact location of the box pulled. This acts as a double check on the alarm and the Department operator gives the telephone alarm to the companies that should respond to that location, informing the first company the exact location in the building in which the box has been pulled.

The A.D.T. company have uniformed men called runners, who respond in automobiles to all A.D.T. alarms. When the alarm is received at night, one man responds with keys to the buildings and with cards showing the locations of all A.D.T. manual boxes, light switches and telephones in the building. The Portland A.D.T. office maintains 25 night watch and Farm Alarm Circuits which register on Sprinkler Supervisory and Valve Alarm Circuits in our City, and 92 Burglar Alarm Circuits which often detect fires.

General Description of Aero System

The Sensitive, Fire-detecting Element is a very small copper tube less than 1/12" in diameter which is strung along or around the ceilings or roofs of the premises to be protected. The tubing contains nothing but air at ordinary atmospheric pressure. In case of fire, the contained air becomes heated and expands.

(To be continued)

Aid Rushed to Torrington, Conn

A three-story brick structure in the center of Torrington, Conn., was virtually destroyed by a fire which caused all apparatus and firemen to respond and for which aid was rushed from Winsted, ten miles away. The fire broke out at 1:32 a.m. When the local department, in command of Chief John A. Palmer, arrived, the rear of a candy store was a mass of flames.

Chief Palmer ordered a general alarm sounded and also sent a call to Winsted.

After ten hours of fire-fighting, only the four walls of the building remained. Several firemen were overcome by smoke and a Torrington fireman was severely injured.

—Courtesy Waterbury Republican-American

Building in Torrington, Conn., Virtually Destroyed

The building was a landmark of the city. The loss in stock and equipment is estimated by the fire department at $150,000. The building itself was valued at $150,000.

THOMAS F. MAGNER.

FALSE ALARMS

—*Courtesy, New Yorker*

"Bring down the little blue georgette with the white pique collar and cuffs."

HISTORY REPEATS

Father and son were members of the department. One day the son remarked to his father at dinner:

"Do you remember the story you told me a couple of years ago about how the Commissioner docked you four days pay?"

"Yes, I think I do."

"Well, Dad, history has repeated itself."

"Oh, Darling, I love you so."

"So what."

PROFITABLE

He was just the hangover of a party that collected in a road house to celebrate the arrival of new fire apparatus. All the others had gone home. Over in a corner a group of waiters were discussing the case.

"I woke up that fellow three times and I'm not going to wake him up again."

"Why don't you have him thrown out?" suggested another.

"Nothing doing! Every time I wake him up he pays his bill."

People say that they often find it hard to tell the difference between weeds and young plants. The sure way, of course, is to pull them all out. If they come up again they are weeds.

ILL TIMED

An old darky was in the habit of running errands for the men at the fire station. He came in one morning just after the men had received word of a pay cut. Being of a sympathetic nature the Negro went over to the desk man and said:

"It shuah is too bad, ain't it, that this heah depression had to come jes' when times is so hard."

"Does your wife choose your clothes?"

"No, she only picks the pockets."

COSTLY WORDS

Duke was saving, and single. The surplus of his monthly check went each month into the bank until it had accumulated to the size where it was ready for investing. He was a good example of the adage that a man who talks to himself has money in the bank.

He would ask himself whether he should take the money out or let it remain. But he wouldn't listen. The bank closed.

Now Duke has changed. He is so mad at himself for not listening to himself that he is not speaking to himself any more.

Then there was Gertie, the suicide blond—dyed by her own hands.

TWO MORE DEAD

Children are a great convenience—but not when company is present. Young hopeful was with his mother in the living room. In another part of the house the Good Provider was entertaining a fellow member of the committee appointed to arrange for the coming firemen's tournament.

"Mother, Daddy wouldn't murder anybody, would he?" asked the youngster.

"Why certainly not, son. What makes you ask that?"

"Well, Mother, I just heard Daddy down in the cellar saying, 'Let's kill the other two, Jim.'"

JUST A LITTLE AIR

She was one of the season's first crop of summer visitors and it was not long before a village resident found great delight in walking her down to the post office and taking her to places. On one walk there was great commotion in the village. The fire whistle blew. Turning to her friend, the young miss asked:

"Why does the whistle blow for a fire?"

"It doesn't blow for the fire. It blows for water. They've got the fire."

And then there was the Scotchman who stood so long in the breadline that he lost his job.

CONTROLLED DIET

Two salesmen met in a cafeteria.

"What's the matter, Bill? You're eating only crackers and milk? Are you on a diet?"

"No, on commission."

"WE'RE HERE TO SUBMIT PRICES AND SAMPLES ON FIRE HOSE. WE HANDLE THE BEST, BUT BEING LOCAL BUSINESS MEN AND INTERESTED IN THE COMMUNITY, WE ARE ASKING NO PROFIT, HENCE THE LOW PRICE!"
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4 PLY HOSE
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Fancy Proposal
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Hose
VALLEY SEED COMPANY
HOSE BID
MAD HATTER 25% FIRE HOSE
GEORGE'S MEN'S SHOPPE
AN' THE JOKE OF IT ALL IS - THEY DON'T EVEN KNOW GOOD HOSE WHEN THEY SEE IT!

—*Drawing by "Art" Espey*

"Ye gods! Give me the old days when a fire hose salesman was a fire hose salesman."

Local merchants have plenty of time now to think and to plan and to dream. Therefore when a city is in the market for fire hose, these men become special agents for some fire hose distributor. A conglomeration of prices, hose samples and business ethics result. One city that had experienced this condition found that bids for supplying fire hose were submitted by many merchants who did not appreciate the importance of good hose. Each bidder was loud in proclaiming that he was trying to save the community money but the consistent effort made to secure the order, belied the statement. Bona-fide representatives of old fire hose manufacturers could not compete under these conditions, and the department is now loaded with an assortment of hose below the customary standard.

FREE INFORMATION

JUST run down the list of equipment and jot down on the coupon below the numbers that indicate the equipment in which you are interested. Then fill out rest of the coupon and mail it to us.

We will then request the leading manufacturers of such equipment to send you descriptive literature and prices direct without any cost to you or obligation whatever.

The manufacturers we notify will gladly do this because they are advertisers and good friends of this publication and want to cooperate with our readers in every way possible in the improvement of their departments. So help yourself!

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10 Asbestos Clothing
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12 Banners, Trumpets, etc.
13 Battery Jars
14 Battery Zincs for Fire Alarm Batteries
15 Bells, Fire Alarm, Municipal
16 Body Equipments
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18 Brakes, Air
19 Brake Linings
20 Brooms, Fire
21 Building Materials, Fire Retardant
22 Caps, Firemen's
23 Chains, Non-Skid, Fire Apparatus
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27 City Service Trucks
28 Coats and Suits, Firemen's Quick Hitch
29 Combination Chemical and Hose Cars
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31 Cutting and Welding Equipment, Electric
32 Deluge Sets
33 Door Openers, Fire Station, Automatic
34 Electric Light Plants
35 Extinguishers, Calcium Chloride
36 Extinguishers, Carbon Dioxide
37 Extinguishers, Soda-Acid
38 Extinguishers, Carbon Tetrachloride
39 Extinguishers, Foam
40 Extinguishers, Powder
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42 Fire Department Supplies, General
43 Fire Exit Devices, Door Opening
44 Fire Alarm Posts
45 Fire Escapes, Portable
46 Fire Escapes, Rigid
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49 Flashlights, Hand
50 Flood Lighting Equipment
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52 Foam Liquid for Extinguishers
53 Gas Masks and Respirators
54 Gas and Smoke Helmets
55 Gas and Smoke Generators
56 Goggles, Firemen's
57 Helmets, Metal, etc.
58 Hose Bridges
59 Hose Carts, Reels and Racks
60 Hose Clamps
61 Hose, Fire
62 Hose, Chemical
63 Hose Holders
64 Hose Jackets
65 Hose Standardization Tools
66 Hydrant Draining Pumps
67 Hydrants, Fire
68 Jacks for Fire Trucks
69 Jacks, Shoring and Prying
70 Ladders, Fire
71 Lightning Arresters
72 Motorcycles, Fire Dept. Equipped
73 Nets, Life
74 Nozzles, Pipes and Miscellaneous Brass Goods
75 Packings, Pump
76 Pads, Pole Hole
77 Paints, Fire Resisting
78 Priming Ether, Motor
79 Pumping Cars, Standard
80 Pumping Cars, Foam
81 Pumps, Fire Apparatus
82 Pumps, Fire Service, Stationary
83 Pumps, Portable for Fire Protection
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116 Wrecking Trucks

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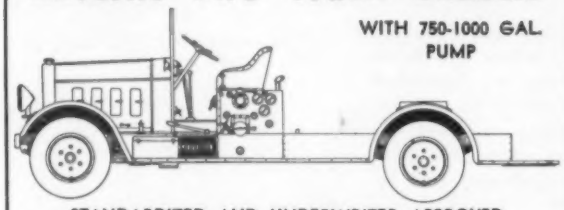

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is a portable turret pipe that can be used on the ground or mounted on the apparatus. This photo shows our three-way gun used on the ground, connected to two lines of hose. This gun may be furnished with either two-way, three-way or four-way Siamese, as desired.

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ADVERTISING PAYS IN FIRE ENGINEERING

	Page
American Steam Pump Co.	178
Arps Mfg. Co., John K.	177
Bi-Lateral Fire Hose Co.	178
Braxmar Co., C. G.	177
Cairns & Brother	183
Clay, Inc., John H.	183
Eastman Co., Samuel	182
Eddy Valve Co.	182
Eureka Fire Hose Mfg. Co.	159
Federal Electric Co.	183
Fulton Bag & Cotton Mills	183
Gamewell Company	162
General Electric Co.	161
General Products Co., The	178
Globe Mfg. Co.	Inside Front Cover
Hale Fire Pump Co.	178
Hewitt-Gutta Percha Rubber Corp.	178
INFORMATION FOR BUYERS	181
Luverne Fire Apparatus Co.	182
Manhattan Rubber Mfg. Div. of Raybestos-Manhattan, Inc.	Back Cover
Morse & Son, Inc., Andrew J.	182
Multiplex Mfg. Co.	183
Northern Pump Co.	183
Smith Mfg. Co., D. B.	177
Sterling Siren Fire Alarm Co., Inc.	178

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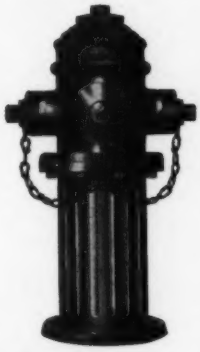

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(Signed) W. R. COLLIN, Chief
Bristol (Tenn.) Fire Dept.

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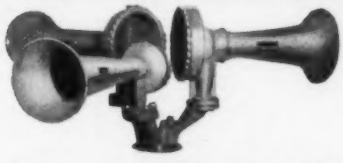
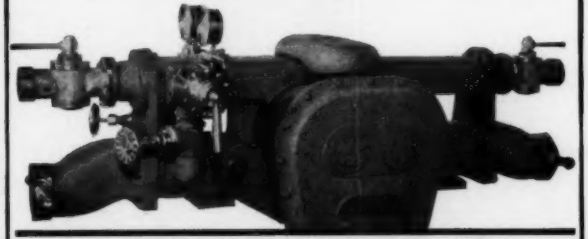
CAIRNS & BROTHER
444 LAFAYETTE STREET - Established 1836 - NEW YORK



TRIPLE COMBINATION 3 TONE FEDERAL WHISTLE

A low pressure triple combination air whistle that will operate off of any existing fire alarm system. It has no equal for tone volume. No moving parts—nothing to get out of order. Guaranteed for 10,000 hours of continuous blowing. Get complete details and attractive price by writing for Bulletin 38.

FEDERAL ELECTRIC COMPANY
8702 South State Street, Chicago, Illinois



NORTHERN PUMP COMPANY
ESTABLISHED 1907
MINNEAPOLIS, MINN.

Mildew growth and fabric rot NOW eliminated

MANHATTAN
Treated
Fire Hose

Manhattan chemists have perfected an original process for treating fire hose fabric with certain salts of rare earth metals. These salts have *radio-active* properties. They permanently *prevent* the growth of mildew colonies, fabric rot, and in addition, renders the hose jackets water repellent in freezing weather.

Careful drying of Manhattan treated fire hose is not necessary. Its original strength, flexibility and durability are preserved indefinitely. The life of the hose is limited only by natural wear or accident incident with use.

Not a "BEFORE and AFTER" Picture

... but an unretouched reproduction of two stock pieces of "mildew proof" treated fire hose, after 90 days in a mildew incubator. No. 1 is the new Manhattan Treated Fire Hose; No. 2 is the "old process" treated fire hose. The photographic illustration speaks for itself

The Manhattan Rubber Mfg. Div. of Raybestos-Manhattan, Inc.

Executive Offices and Factories: Passaic, New Jersey

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